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Centre of Koper

RDA South Primorska



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SPATIAL PLANNING

MAP CAMP Slovenia

Conception of Spatial Development of South Primorska

and the Programme of Measures for Its Implementation



*Prostorsko načrtovanje,
projektiranje in varstvo
okolja Novo mesto, d.o.o.*



Oikos, development consulting, Ltd.

November 2006



Občina Piran



Občina Izola



Mestna občina
Koper



Občina
Hrpelje-Kozina



OBČINA
DIVAČA



OBČINA
SEŽANA



Občina Ilirska
Bistrica



Občina Komen

The Conception of Spatial Development of South Primorska and the Programme of Measures for Its Implementation

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SUMMARY

The purpose of the Conception of Spatial Development of South Primorska is:

- to strengthen the sustainable spatial development of the region of South Primorska, and
- to provide a strategic spatial framework for priority investments (strategic investments) in South Primorska for the period from 2007 to 2013.

The Conception of Spatial Development thus represents a spatial complement to the Regional Development Programme of South Primorska and the National Development Programme for 2007–2013. It is a guideline for future spatial development of the region, as it provides guidance for the preparation of national and municipal spatial documents.

The key objectives to be achieved by the preparation of the Conception are:

- to determine the key advantages and weaknesses of the past spatial development on the basis of the analysis of the situation and trends;
- to establish a vision and conception of spatial development in the region;
- to formulate the regional conception of the distribution of selected spatial activities while taking into account the characteristics of individual regional areas of Slovenian Istra, Kras and Brkini;
- to prepare spatial development guidelines representing the basis for strategic national and municipal planning documents;
- to define the measures for the implementation of the regional conception, taking into consideration the possibilities of cooperation with the neighbouring regions in Slovenia, within the EU (Italy), and with the regions in non-member countries (Croatia).

The vision, objectives and the strategy of spatial development were formulated on the basis of expert groundwork carried out in Phase 1 and 2 of the project on the preparation of the Conception of Spatial Development of South Primorska. The expert groundwork took into consideration the results of workshops within the horizontal SPSA (Systemic and Prospective Sustainability Analysis) project and special workshops organised for spatial planning stakeholders.

Prior to the determination of spatial development objectives, a framework development scenario was formulated in the abovementioned workshops in order to illustrate the consequences in the absence of strategic interventions. Later on, the scenario was supplemented by detailed analyses. The scenario of sustainable spatial development of the region was also drawn up within the framework of SPSA activities.

Subsequently, in order to prevent unsustainable solutions and to avoid negative and undesirable results, the objectives were set up and an appropriate strategy of spatial development was established.

Assessment of the compliance of the vision and the objectives of regional spatial development with the objectives of superior strategic documents, directed towards strengthening of sustainable development, was carried out. Moreover, the compliance with the objectives of the Mediterranean Strategy for Sustainable Development, the EU Sustainable Development Strategy, the Spatial Development Strategy of Slovenia and the National Environmental Protection Programme was also assessed. The spatial conception is fully in line with the Regional Development Programme of South Primorska 2007–2013 and, in fact, it is its integral part. The internal coherence of the Conception was also examined in order to assess the compliance of measures and projects with the set spatial objectives.

The Conception of Spatial Development of South Primorska was prepared on the aforesaid basis, followed by drawing up of the proposal for the programme of measures and policies for the implementation of spatial development objectives. The proposal was adjusted in the workshop organised for municipal representatives.

Finally, the assessment at the regional level was carried out of the eventual impacts of the Conception on the environment, nature, human health and cultural heritage.

The vision of spatial development of South Primorska reads:

"Spatial development of South Primorska will support sustainable welfare, equitable distribution and high quality of life, whilst protecting and strengthening natural, spatial and cultural goods."

The objectives of spatial development are to:

1. **Increase the competitiveness of the region by**
 - the establishment of competitive cross-border polycentric network of settlements;
 - the establishment of a competitive countryside with a high quality of living;
 - better external and internal cohesion of the region.
2. **Enhance the quality of life in the region by:**
 - strengthening of sustainable communities (towns);
 - strengthening the identity and attractiveness of the region;
 - sustainable management of natural goods.

Conceptions and measures with projects were designed for the following areas:

Settlement

Establishment of a network of settlements through the following measures:

- Competitive polycentric urban network
- Preservation of settlement and rural development
- Strengthening the partnership between urban and rural areas
- Renewal of towns/settlements

Harmonious spatial development is based on a polycentric network of settlements, which allows meeting the needs of all communities and the attainment of their development potential within the limits dictated by the environment and the orientation to sustainable development. The key feature of polycentric network of settlements in the region is the establishment of a **three-tier network of settlements**, designed to promote:

- intensive changes in **strategically significant urban centres** through the development of their economic and service role and sustainable development policies, leading to the strengthening of their competitiveness in the broader EU area;
- changes in **more important local centres/settlements** defined as focal points ensuring locally significant development;
- small-scale changes in **other settlements**, directed mainly to the improvement of living conditions in those settlements and the strengthening of sustainable development.

In order to strengthen the competitiveness of towns and settlements or the network of settlements in the broader EU area, it is essential to establish closer cooperation with cross-border cities, in particular Trieste, Gorizia, Rijeka and the towns in Croatian Istria.

The general criteria for the development of a competitive settlement network are:

- parallel and coordinated planning of settlement and transport (transport networks, public passenger transport, transport hubs);
- rational land use by focusing on the internal development of settlement areas;
- efficient allocation and appropriate quality of social services and infrastructure within the meaning of infrastructure equalisation (in line with the role of a settlement within the settlement hierarchy) in urban and rural settlements: ensuring the basic supply services for all inhabitants within ten-minute walk, ensuring safety on the way to school, ensuring adequate number of number of enrolment places in kindergartens, properly maintained local road network, public passenger transport, connection to public sewage system and waste water treatment plants and ensuring proper waste water management respectively.

Establishment of support economic infrastructure network through the following measures:

- Ensuring the supply of land for production and business activities

For the purposes of the development of economic activities, economic zones will be defined and adequately regulated. In addition to socio-economic conditions, the following spatial criteria will be taken into consideration in the development of economic zones: optimum connection with transport and energy networks, and other infrastructure; the vicinity and size of already existing economic

zones and transport terminals; the size of settlements, their role in the urban system and access to the locations of planned economic zone locations; spatial opportunities and limitations arising from the state or characteristics of the natural and cultural landscape in which an economic zone is placed. Business zones will be developed in Koper, Sežana, Hrpelje-Kozina, Ilirska Bistrica, Divača, Knežak, Podgrad, Starod, Jelšane, Izola, Piran and Komen.

A technology park will be established in Koper in which infrastructure will be established for technological enterprises (start-up and operative enterprises) and the development of supporting services. Two incubators will be set up in Koper and Sežana. In addition, a university incubator will start to operate in Koper. In accordance with the needs, technology parks and incubators may develop in future also on other locations.

Establishment of tourist infrastructure network and support environment for the management of tourist destinations through the following measures:

In line with the Strategy for Sustainable Tourism Development of South Primorska, the development objectives, which are directly related to spatial objectives, are:

- to strengthen the sustainable character of tourism development as an element of integrated quality management through integrated management of tourist destination (and sub-destinations) for the development and marketing of new (sustainable) tourist products and the improvement of the existing tourist products, services and efficient investment in tourist accommodation and support infrastructure, in compliance with the principles of sustainability;
- to reduce environmental impacts of tourist activities;
- a more even spatial distribution of tourist capacities and an increased role of the hinterlands of Slovene Istra, Kras and Brkini;
- selective development of coastal tourism by focusing investments on new tourist capacities especially within the existing settlement areas;
- to relieve the coastal strip from transit and stationary traffic, accessibility management in tourist and recreation areas, improved accessibility by the development of sustainable transport modes (public passenger transport, footpaths, cycle tracks) and investment in information infrastructure;
- improved utilisation of the potential of historical centres (towns and villages) for the development of tourism;
- development of tourist infrastructure for sustainable tourism.

Transport

Establishment of sustainable mobility through the following measures:

- Integrated planning of transport infrastructure
- Road transport infrastructure
- Rail transport infrastructure
- Maritime transport
- Airport infrastructure

From the point of view of sustainable development, one of the main problems in the region is excessive increasing of car traffic, which causes ever-greater environmental and spatial problems, pressures on the nature and biodiversity, especially in the coastal strip and densely urbanised areas.

The Conception of Spatial Development of South Primorska defines a transport concept which will be based on the principles of sustainable mobility. Its objective is to establish an efficient and competitive system of public transport and thus reduce environmental and spatial impacts of mobility, while at the same time improve the accessibility of transport services for a wider circle of users. The measures within spatial planning will play a crucial role, as a wise location of activities reduces or prevents the growth in mobility needs.

To increase the regional competitiveness and to realise its development potential, it is of key importance to:

- establish an efficient system of sustainable mobility;
- complete construction of the missing parts of motorway network in the region;
- construct the second railway line Koper–Divača and to modernize the railway network;
- construct the Koper–Trieste railway connection;
- reclassify and improve some roads in order to provide better supply to remote areas;

- construct the third pier in the Port of Koper and establish a maritime passenger terminal in Koper and passenger piers in Portorož, Izola and Piran;
- modernize the Portorož Airport and improve the links with the airports at Brnik, Ronche, Pula and Krk.

The transport systems, particularly road, railway and maritime, both passenger and freight, will be connected at contact points, thus enabling the changing (freight, passengers) between different transport modes. Multimodal logistics centres will be established in Koper (integration of maritime, rail and road transport) and in Sežana and Ilirska Bistrica (integration of rail and road transport). In order to ensure appropriate accessibility to social services in urban areas, it is of particular importance to connect the said transport systems with properly arranged footpaths and cycling tracks.

Municipal infrastructure

Achievement of efficient municipal infrastructure through the following measures:

- Upgrading of the basic environmental infrastructure
- Sustainable power supply
- Development of information and communication technologies

Drinking water will be provided from the present three water supply systems:

- Rižana Water Supply Company, which utilises the sources of the Rižana River, Grdola and Brestovica;
- Kras Water Supply Company, which utilises the catchment of Klariči (Brestovica) and Nanos water resources;
- Ilirska Bistrica Water Supply Company, which utilises the Bistrica River source.

In order to satisfy all the needs for water supply in the region, the proposed solution has been to construct two retaining reservoirs basins on the watercourses of Padež and Suhorka, covering an adequate catchment area, so that construction would be possible in more phases and the safety of the water resource bigger. The new water source should ensure water supply on a long term for the residents provided with water by Rižana Water Supply Company and, at the same time, it will represent a reserve source for the Kras water supply system as well as for water supply in the Municipality of Ilirska Bistrica. A connection should be established within the regional water supply system, namely between the Kras and Ilirska Bistrica water supply systems and between the Ilirska Bistrica system and the planned Padež–Suhorka water source. The municipalities and public enterprises will continue the construction and renewal of drinking water supply infrastructure (asbestos cement pipes, there are still pockets of unregulated water supply in the region – Kras, Brkini), improve the management and protection of local water sources and promote utilisation of retained and secondary waters.

The regulation of discharge and treatment of urban waste water is based on the national and municipal Operational Programmes for the Discharge and Treatment of Urban Waste Water. It is foreseen that the infrastructure in settlement areas with more than 10,000 PE will be complete until the end of 2008, and for those between 1,000 and 10,000 PE until the end of 2015 (over 95% of the load will be connected to public sewage system until the end of 2017), as well as the settlements with over 50 PE and the population density above 20PE/ha (or 10 PE/ha) in vulnerable and catchment areas.

A comparative study of investment costs for equipping the agglomerations on karstic terrain shows that the implementation of discharge and treatment of waste water in such places is very expensive. This may be explained by highly expensive excavations in rock (limestone) and unfavourable terrain configuration (no constant inclination), which dictates a larger number of pumping stations and smaller treatment plants.

The objectives of operational programmes can only be achieved with substantial State support. The Republic of Slovenia adopted the above standard for agglomerations with 50 PE; therefore, the State must ensure adequate resources. The Municipalities propose that a direct and permanent source should be provided for them through water and environment pollution taxes.

In considering the extension of settlement areas, it is necessary to examine the condition of waste water infrastructure, because the equipping is highly cost demanding and, from the economic point of view, also ineffective due to the small economy of scale. It is therefore necessary to give priority to the agglomerations with suitable infrastructure. A special attention should be paid to the facilities

for the retention of rain water in combined and rain water sewage systems, as the discharge of polluted waters from these systems exerts a strong pressure on water sources in the region in question (a threat to natural resources – increased eutrophication of bathing waters).

Especially because of considerable financial burdens, the implementation of municipal Operational Programmes is very demanding. As a result of characteristic dispersed settlement in the area, the cost of establishing adequate waste water management is very high or higher than the determined eligible cost. For this very reason, appropriate alternative solutions will have to be determined in the field of waste water management. Inter-municipal cooperation in planning and construction of municipal infrastructure is of utmost importance in ensuring efficient waste water management, as also for efficient operation of municipal utility services.

An agreement should be reached as soon as possible on a suitable location for the construction of regional Waste Management Centre (WMC). The location, however, should be chosen through active participation of residents in all planning and construction procedures. Alternative solutions for waste management should be developed and a comparative analysis carried out at regional level. In this respect, the cooperation between municipalities is of utmost importance.

It is planned to construct a network of transmission and distribution gas pipeline. Special emphasis should be placed on the development of local energy supply and the utilisation of renewable energy sources. Because of the geographical situation, the use of **solar energy** should be seriously considered in the coastal part of the region.

Internal/subregional fibre optic connection should be set up in the region to form a backbone for the establishment and provision of new technologies, which will influence also the mode of operation and spatial redistribution of activities. In order to establish a modern communication system, it is necessary to interconnect all larger centres (municipality centres) by efficient transmission (optic cables). The municipalities and the region will promote development and introduction of modern telecommunication infrastructure also on the level of local centres.

Landscape

Enhancement of agriculture, fisheries and forestry through the following measures:

- Development of agriculture
- Development of fisheries
- Improvement of the economic value of forests

Modern approaches to food production (integrated production, ecological agriculture), directed towards sustainable development and the exploitation of special natural conditions (soil, climate, relief), are increasingly gaining importance in the region. Considering the natural structure and climatic situation, the conditions in various parts of the region are suitable for different kinds of farming which development would be reasonable also in the future, thus contributing to the development of internal specialisation of agricultural production in the region.

In Kras and Slovenian Istra there is an explicit need for irrigation of agricultural land; however, detailed analyses of the need for and the viability of irrigation have not been done. It is necessary to carry out a detailed analysis of the situation, a feasibility study and a cost-benefit study to determine the relevance of irrigation measures by areas and by types and intensively of production.

Fishery is important on the coastal strip and at sea, and mariculture is developed on three locations (fish farming and shellfish farming). Modern infrastructure is required to develop fishery, which includes the arrangement of suitable fishing ports and the space for the unloading of fish. These facilities are planned on the existing locations in Izola, Koper and Piran, while potential locations are also Ankaran, Strunjan and Seča, as related to the present locations of mariculture.

Integration of natural and cultural potentials of the region through the following measures:

- Protection, management and integration of cultural heritage
- Protection, management and integration of protected natural areas

The objectives of the integration of natural and cultural potentials of the region through an established management system are as follows:

- development of tourist products in connection with nature protection areas and cultural heritage;
- harmonisation of protected areas management regimes;

- preparation and implementation of common projects (development of tourist destinations, thematic paths);
- joint promotion and raising the awareness of local population and visitors;
- preservation and promotion of regional identity.

Protection, use and management of waters

Protection against natural disasters

In a minor part of the region, flood safety is inadequate because of urbanization in flood risk areas and in places still insufficiently regulated torrential watercourses (e.g. the rivers of Reka, Dragonja, Drnica, Badaševica with tributaries, and others). Flood risk exists also in the areas of the salt pans of Sečovelje and Strunjan due to inadequate high water dykes.

Flood control works should be undertaken in areas of high flood risk with reference to the objectives of sustainable and ecological regulation of waters and aquatic ecosystems in order to reduce life-threatening events and material damage caused by both excessive and deficient precipitation.

Water regulation will involve non-construction and construction measures. Non-construction measures will be directed particularly to public awareness raising with regard to natural processes and their incidence, sound management of risk areas, improved hydrometeorological forecasting, monitoring and recording of flood events, enhanced public warning and information on flood and landslide risks in the region and appropriate urbanization, adjusted to correspond both to the available quantity of water and flood and landslide risks.

Construction measures are still needed for water regulation, because centuries-long human activities, in particular settlement, have strongly intervened in natural processes of flood and catchment areas. In order to protect the existing settlement and to reduce harmful impacts of floods and landslides as well as to retain and preserve the quantity of water to enrich water reserves, the artificially regulated water regime should be preserved by construction works.

Management of coastal areas

Partnership approach is crucial to development and spatial planning of the coastal area. To this end, partnership will be strengthened to achieve integrated management of the coastal area, joining the stakeholders in the field of regional development, spatial planning, water management, nature preservation, fishery, transport, protection of cultural heritage and others.

The objectives of the establishment of a coastal strip with a special management regime are:

- establishment of harmonised spatial planning rules along the entire length of the coast in municipal spatial plans;
- establishment of inter-municipal harmonised spatial conception for specific activities (moorings, operative coast for maritime activities);
- establishment of harmonised measures to disburden the coast by reducing the motor traffic, and management of the coast accessibility;
- preparation and implementation of common projects (coastal footpath along the entire coast length, construction of an island, the programme of green areas arrangement, the programme of bathing areas arrangement);
- development of tourist products related to the coastal strip and associated protected areas of nature and cultural heritage;
- harmonisation of coastal strip management regimes;
- joint promotion and raising the awareness of the citizens and the users of the coastal strip.

The horizontal measures defined for the implementation of the Conception are:

- Cross-border cooperation
- Cooperation with the State on common tasks
- Cooperation with neighbouring regions (provinces)
- Inter-municipal cooperation on strategic spatial projects
- Active land policy

Recommendations for follow-up activities:

- At the regional level, the criteria for directing and promoting the development of settlements and their role in the network of settlements should be elaborated in detail on the basis of general criteria.
- In the project follow-up, special attention should be given to systematic collection and treatment of information on transport and the consideration of the three types of transport: transit, tourist and local. This will serve as a basis for the formation of appropriate integrated transport plans, with a purpose to promote sustainable mobility modes and coordinated planning of transport and settlement network.
- In the project follow-up, suitable alternative solutions for the regulation of waste water management should be determined. In providing efficient waste water management, it is imperative to ensure inter-municipal cooperation in planning and construction of municipal infrastructure, as also for efficient operation of municipal utility services.
- An agreement should be reached as soon as possible on a suitable location for the construction of regional Waste Management Centre (WMC). The location, however, should be chosen through active participation of residents in all planning and construction procedures. Alternative solutions for waste management should be developed and a comparative analysis carried out at regional level. In this respect, the cooperation between municipalities is of utmost importance.
- Due to the ever-increasing pressure on the use of the sea (inner sea, territorial sea) – transport, fishery and mariculture, recreation, protected areas, energy supply, etc. – a spatial plan will be prepared for the sea use, providing a spatially harmonised use of the sea and various use regimes. The municipalities will launch an initiative that the spatial plan be harmonised in the area of the whole Gulf of Trieste, in cooperation with partners from Italy and Croatia and their regional and local representatives respectively.

Drafting of projects:

- For the measure *Strengthening the partnership between urban and rural areas* no implementation projects, supposed to be prepared in cooperation with the municipalities and the potential operators, have been elaborated. The projects should be directed particularly to the division of functions between urban and rural areas and the improvement of the quality and accessibility of social services in rural areas.
- For the measure *Integrated planning of transport infrastructure* there have no comprehensive projects been elaborated, which should be directed towards the drawing up of appropriate integrated transport plans, with a view to promote sustainable mobility modes and harmonised planning of transport and settlement networks.
- For the measure *Airport infrastructure* there are no projects envisaged. The projects should be directed particularly to the modernization of the Portorož Airport by taking into consideration the restrictions dictated by the vicinity of the Sečovlje Saltpans Landscape Park.
- For the measure *Railway transport infrastructure*, the implementation plan for strategic connection between Koper and Trieste is missing.
- For the measure *Development of Agriculture*, no integrated projects have been prepared. The projects should be directed primarily to the establishment of spatial conditions for the development of agriculture and the infrastructure for the implementation of agricultural activities. Some projects (e.g., irrigation, construction of greenhouses, etc.) will demand the preparation of expert groundwork in the form of feasibility studies, environmental impact assessments, etc.

The assessment of the impacts of the Conception of Spatial Development of South Primorska on the environment, human health and cultural heritage was also carried out at the regional level. The impact of the plan implementation on the abovementioned segments were assessed on the basis of the effects of plan implementation on selected environmental objectives of the plan:

It was established during the report preparation (identification and assessment of impacts) that the implementation of the Conception would have a **positive effect** on (presented in a random order):

- sustainable use of natural resources, particularly in the sense of rational use of land and renewable energy sources;

- improved status of surface waters, groundwater and the sea, as the input of pollutants into waters will reduce due to the construction of municipal infrastructure and by taking the utmost account of legal acts relating to water protection areas while locating the activities/facilities which affect such areas;
- reduction of emissions into the air (public passenger transport, cycle tracks, footpaths, utilisation of renewable energy sources, reduction of the need for motorised mobility due to good accessibility of social services and the infrastructure for alternative transport modes, improved traffic flow, etc.);
- reduction in the number of people exposed to noise, particularly because of improved public transport and consequent calming of car traffic and also appropriate locating of activities (land use division) in order to reduce noise in residential environments;
- more efficient preservation of nature and biodiversity through the actions directed towards the establishment of a network of protection areas with active management (management plans and clear management structure);
- improved access to social services, thus contributing to the improvement of living conditions;
- ensuring flood safety and prevention of inappropriate land use in erosion areas;
- preservation of cultural heritage, especially in terms of maintenance of the function of buildings and cultural heritage areas;
- transport efficiency; however, it should be noted that the achievement of the environmental objectives in the field of public transport does not depend only on the accessibility of public transport but also on other factors, such as regulated and harmonised timetable of all public means of transport, single tickets and, finally, the mentality of inhabitants;
- rerouting of freight to railways; however, it should be also noted here that transfer does not depend only on arranged loading hubs but also on other factors, such as travel time, financial aspects, etc.

On the other hand, it is appropriate to note that the implementation of the measures proposed in the Regional Development Programme 2007–2013 and spatially integrated in the Conception may have a **negative effect** on (presented in a random order):

- water consumption by industry – measures should be taken to reduce losses in water supply system, re-use the waste water, introduce integrated management of demand for water in agriculture and measures for rational use of water in tourism, households and elsewhere;
- further increase in the emission of air pollutants, which already presents a problem due to cross-border pollution (the impact of Italian industrial basin in the Po River Plain), due to the activities increasing transport flows and consequently the amount of air pollutants; therefore it is urgent to reroute freight to railways and strengthen sustainable mobility;
- quality of the sea water due to the foreseen increase in maritime transport, both cargo and passenger; it is therefore necessary to take fully into account the regulatory requirements and the stipulated mitigation measures to minimise the negative environmental impacts of maritime transport;
- increased noise emissions resulting from the planned construction of traffic infrastructure (new road sections, the second Koper–Divača railway line, increased traffic flows); however, the planned modernization of roads and railway has also a positive effect on the reduction in noise emissions (better traffic fluidity, less traffic congestions, modern technology)

The projects and measures stated in the Conception of Spatial Development and based on national and regional development acts (National Development Plan or National Strategic Reference Framework, National Environmental Action Programme, Regional Development Programme of South Primorska, all for the period 2007–2013) will contribute also to the achievement of broader objectives of the European Sustainable Development Strategy and the Mediterranean Strategy for Sustainable Development. In particular, the contribution in the following fields should be highlighted:

- in the field of transport, especially by introduction of sustainable mobility and a greater role of railways in freight transport;

- reduced pressures on aquatic environment, in particular by implementation of an extensive and financially very demanding construction of infrastructure for discharge and treatment of urban waste water and by carrying out other measures in the framework of water management plan in the Adriatic Sea water watershed;
- in the field of waste management, particularly with the establishment of WMC, the system of integrated waste management in the region, the remediation of old burdens (recording and remediation of illegal landfills), regulation of waste management along the coast (washed-up waste, waste in the area of municipal moorings), information, awareness raising and public promotion;
- in the field of energy supply, by promoting the measures for increased utilisation of renewable energy (solar, biomass, and also wind energy, if the locations are not in contradiction with the protection of landscape, nature and biodiversity);
- in the field of tourism, especially by a more even spatial distribution of tourist activities, prudent spatial planning of coastal tourism capacities (within the existing settlement areas), closer integration of tourism, more efficient destination management and development of infrastructure for sustainable development of tourism;
- in the field of spatial development and urban development, particularly by promotion of even spatial development and control of littoralization, reurbanization of degraded areas along the coast and revitalisation of urban and other centres;
- in the field of coastal and marine resources management, in particular by stopping the urbanization of the coastal strip, reurbanization of degraded coastal areas, measures for the protection of nature and biodiversity (establishment of a system for nature protection areas management, systems of monitoring the state of biodiversity, renewal of mutilated parts of nature, integration of protected areas and development of tourist products in relation to nature protection), arrangement of footpaths along the entire coast.

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1. INTRODUCTION

1.1 PURPOSE OF THE CONCEPTION OF SPATIAL DEVELOPMENT OF SOUTH PRIMORSKA

The **purpose** of the Conception of Spatial Development of South Primorska is:

- to strengthen the sustainable spatial development of the region of South Primorska, and
- to provide a strategic spatial framework for priority investments (strategic investments) in South Primorska for the period from 2007 to 2013.

The Conception of Spatial Development thus represents a spatial complement to the Regional Development Programme of South Primorska and the National Development Programme for 2007–2013. It is a guideline for future spatial development of the region, as it provides guidance for the preparation of national and municipal spatial documents.

Spatial development and programming at regional level remain the basis for the guidance of spatial development in the region.

1.2 OBJECTIVE OF THE CONCEPTION OF SPATIAL DEVELOPMENT OF SOUTH PRIMORSKA

The objective of the Conception of Spatial Development is to define a long-term model of spatial development of the region, which includes the improvement of economic competitiveness of the region as well as the improvement of the quality of living, environmental protection, nature conservation and sustainable use of natural resources, integrated preservation of cultural heritage and protection against natural and other disasters, while strengthening the inter-municipal cooperation and taking into consideration the views of individuals and population groups.

The model is supposed to indicate the path of accelerated development in relation to more advanced neighbouring regions in Italy, reduction of development disparities between the various parts of the region, without compromising the satisfaction of the needs of future generations.

The key objectives to be achieved by the preparation of the Conception are:

- to determine the key advantages and weaknesses of the past spatial development on the basis of the analysis of the situation and trends;
- to establish a vision and conception of spatial development in the region;
- to formulate the regional conception of the distribution of selected activities in space while taking into account the characteristics of individual regional areas of Slovenian Istra, Kras and Brkini;
- to prepare spatial development guidelines representing the basis for strategic national and municipal planning documents;
- to define the measures for the implementation of the regional conception, taking into consideration the possibilities of cooperation with the neighbouring regions in Slovenia and within the EU (Italy in particular) and with the regions in non-member countries (Croatia in particular).

1.3 THE CONCEPTION OF SPATIAL DEVELOPMENT OF SOUTH PRIMORSKA WITHIN THE CAMP FRAMEWORK

The preparation of the Conception of Spatial Development of South Primorska is being carried out within the CAMP Slovenia project, as the project itself is focused mainly on spatial planning and the themes related to spatial planning. The Conception of Spatial Development of South Primorska is the main project within the CAMP. Special attention is paid to the spatial arrangements of the coastal strip, sustainable tourism development, management of protected areas and the protection of water resources.

1.4 CHANGES IN SPATIAL LEGISLATION

The Spatial Planning Act (ZUreP-1) (OG RS, No. 110/02) defines a Conception of Spatial Development as a guiding document for spatial development, which, subject to the guidelines of the Spatial Development Strategy of Slovenia and in relation to other development documents, determines spatial planning conceptions, harmonised at the national and municipal levels. During the course of preparation of new spatial legislation, the process of preparation of the regional Conception of Spatial Development was brought to a halt on the part of the Ministry for the Environment and Spatial Planning, Directorate of Spatial Planning. Considering that the project was carried out within the framework of CAMP, with international financing, a solution had to be found to continue and complete the started project. Therefore, the project was redrafted into the Conception of Spatial Development of South Primorska and the Programme of Measures for its Implementation, which is no more considered a spatial document but the expert groundwork for directing spatial development in the region and the preparation of municipal spatial planning documents.

In the last proposed Spatial Planning Act (25 November 2006, adopted at the 97th regular session of the Government on 16 November 2006), a regional spatial plan is defined as an inter-municipal spatial planning document for the implementation of regional development programmes under the regulations of the Promotion of Balanced Regional Development Act, which stipulates in the case of planning of spatial arrangements of regional significance, covering or affecting the area of several municipalities that municipalities which have prepared a common regional development programme, prepare also a regional spatial plan.

1.5 THE PROCESS OF DRAFTING THE CONCEPTION

The vision, objectives and strategy of spatial development were formulated on the basis of expert groundwork carried out in Phase 1 and 2 of the project on the preparation of the Conception of Spatial Development of South Primorska. The expert groundwork took into consideration the results of workshops within the horizontal SPSA (Systemic and Prospective Sustainability Analysis) project and special workshops organised for spatial planning stakeholders.

Prior to the determination of spatial development objectives, a framework development scenario was formulated in the abovementioned workshops in order to illustrate the consequences in the absence of strategic interventions. Later on, the scenario was supplemented by detailed analyses. The scenario of sustainable spatial development of the region was also drawn up within the framework of SPSA activities.

Subsequently, in order to prevent unsustainable solutions and to avoid negative and undesirable results, the objectives were set up and an appropriate strategy of spatial development was established.

Assessment of the compliance of the vision and the objectives of regional spatial development with the objectives of superior strategic documents, directed towards strengthening of sustainable development, was carried out. Thus, the analysis was performed of the compliance with the objectives of the Mediterranean Strategy for Sustainable Development, the EU Sustainable Development Strategy, the Spatial Development Strategy of Slovenia and the National Environmental Protection Programme. The findings are presented in Chapter 6. The Spatial Conception is fully in line with the Regional Development Programme of South Primorska 2007–2013 and it actually represents its component part.

The Conception of Spatial Development of South Primorska was prepared on the aforesaid basis, followed by drawing up of a proposal for action programme and policies for the implementation of spatial development objectives, which was harmonised and supplemented at a workshop attended by municipal representatives. The assessment of internal coherence of the Conception was carried out, including the assessment of the compliance of measures and projects with the set spatial planning objectives. The findings are described in Chapter 5 and a summary table is annexed to this document.

Finally, the assessment was done of eventual impacts of the Conception on the environment, nature, human health and cultural heritage at the regional level.

The document was published on the website of the Regional Development Centre Koper, and all spatial planning stakeholders were invited to contribute their comments and suggestions through electronic mail. The document was complemented also by comments and recommendations by the members of CAMP Project Advisory Board and Steering Committee.

2. STRATEGIC FRAMEWORK

The key factors in formulating the Conception of Spatial Development are:

- international, national, regional and local policies and programmes;
- economic, social and environmental trends.

2.1 INTERNATIONAL, NATIONAL, REGIONAL AND LOCAL POLICIES AND PROGRAMMES

The key international documents considered as the basis in drawing up the Conception of Spatial Development of South Primorska are:

UNEP/MAP:

- Mediterranean Strategy for Sustainable Development;
- Action Plan for the Protection of the Marine Environment and the Sustainable Development of the Coastal Areas of the Mediterranean (MAP Phase II)

European Union:

- Lisbon Strategy (Growth and jobs – working together for Europe's future)
- EU Sustainable Development Strategy;
- European Spatial Development Perspective;
- Environment 2010: Our future, Our choice – The Sixth Environment Action Programme;
- Thematic Strategy on the Urban Environment.

Slovenia:

- National Development Programme 2007–2013;
- Spatial Development Strategy of Slovenia;
- Resolution on National Environmental Action Plan 2005–2012.

Region:

- Regional Development Programme for South Primorska 2007–2013.

2.1.1 In the Context of the Mediterranean Action Plan

Document Title	Objectives
Mediterranean Strategy for Sustainable Development	<p>Contribute to economic development by enhancing Mediterranean assets.</p> <p>Reduce social disparities by implementing the Millennium Development Goals and strengthening the cultural identity.</p> <p>Change unsustainable production and consumption patterns and ensure the sustainable management of natural resources.</p> <p>Improve governance at the local, national and regional levels.</p>
Action Plan for the Protection of the Marine Environment and the Sustainable Development of the Coastal Areas of the Mediterranean (MAP Phase II)	<p>Ensure sustainable management of natural marine and land resources and integrate the environment in social and economic development, and land-use policies.</p> <p>Protect the marine environment and coastal zones through prevention of pollution, and by reduction and, as far as possible, elimination of pollutant inputs, whether chronic or accidental.</p> <p>Protect nature, and protect and enhance sites and landscapes of ecological or cultural value.</p> <p>Contribute to the improvement of the quality of life.</p>

2.1.2 In the Context of the European Union

Document Title	Objectives
Lisbon Strategy	<p>Competitiveness, building on the existing assets and under-utilised potentials in the region related to the existing economic base.</p> <p>Attractiveness, building new assets for the region that can ensure an inflow of investments and skills, in particular in support of a knowledge-based economy.</p> <p>Liveability, ensuring cohesion and a sustainable community with a high level of quality of life and environment for the citizens and for existing as well as future activities.</p>
EU Sustainable Development Strategy	<p>Limit climate change and its costs and negative effects to society and the environment.</p> <p>Ensure that our transport systems meet society's economic, social and environmental needs whilst minimising their undesirable impacts on the economy, society and the environment.</p> <p>Promote sustainable consumption and production patterns.</p> <p>Improve management and avoid overexploitation of natural resources, recognising the value of ecosystem services.</p> <p>Promote good public health on equal conditions and improve protection against health threats</p> <p>Create a socially inclusive society by taking into account solidarity between and within generations and to secure and increase the quality of life of citizens as a precondition for lasting individual well-being.</p> <p>Actively promote sustainable development worldwide and ensure that the European Union's internal and external policies are consistent with global sustainable development and its international commitments.</p>
European Spatial Development Perspective	<p>Development of a balanced and polycentric urban system and a new urban-rural relationship: Polycentric and balanced spatial development in the EU. Dynamic, attractive and competitive cities and urbanised regions. Indigenous development, diverse and productive rural areas. Urban-rural relationship.</p> <p>Parity of access to infrastructure and knowledge: Integrated approach for improved transport links and access to knowledge. Polycentric development model as a basis for better accessibility. Efficient and sustainable use of infrastructure.</p>

	<p>Wise management and preservation of natural and cultural heritage: Natural and cultural heritage as a development asset. Preservation and development of the natural heritage. Water resource management – a special challenge for spatial development. Creative management of cultural landscapes. Creative management of the cultural heritage.</p>
<p>Environment 2010: Our future, Our choice – The Sixth Environment Action Programme</p>	<p>Stabilise the atmospheric concentrations of greenhouse gases at a level that will not cause unnatural variations of the earth's climate.</p> <p>Protect and restore the functioning of natural systems and halt the loss of biodiversity in the European Union and globally.</p> <p>Protect soils against erosion and pollution.</p> <p>Achieve a quality of the environment where the levels of man – made contaminants, including different types of radiation, do not give rise to significant impacts on or risks to human health.</p> <p>Ensure the consumption of renewable and non-renewable resources does not exceed the carrying capacity of the environment. To achieve a de-coupling of resource use from economic growth through significantly improved resource efficiency, dematerialisation of the economy, and waste prevention.</p>
<p>Thematic Strategy on the Urban Environment</p>	<p>Contribute to a better quality of life through an integrated approach concentrating on urban areas.</p> <p>Contribute to a high level of quality of life and social well-being for citizens by providing an environment where the level of pollution does not give rise to harmful effects on human health and the environment and by encouraging sustainable urban development.</p> <p>Four priority themes:</p> <ul style="list-style-type: none"> – sustainable urban management; – sustainable urban transport; – sustainable urban construction; – sustainable urban design.

2.1.3 In the Context of National Development Documents

Document Title	Objectives
<p>National Development Programme 2007–2013</p>	<p>Development and investment priorities:</p> <ul style="list-style-type: none"> – competitive economy and faster growth; – efficient creation, two-way flow and application of knowledge for economic development and high-quality jobs; – an efficient and less costly state; – a modern social state and higher employment; – integration of measures to achieve sustainable development.

	<p>Objectives:</p> <ul style="list-style-type: none"> – to increase inward and outward investment into the economy and entrepreneurship and promotion of the internationalization of Slovene companies in order to increase competitiveness; – to increase the supply and adjust tertiary education, and research and development to the needs of the economy to achieve global competitiveness of companies, products and services; – to increase the quality and efficiency of government services and reduce public expenditure by elimination of services, which can be provided on the market, from the national budget; – to raise labour market flexibility and reduce social exclusion and vulnerability; – to ensure high quality of living, based on the development of culture and national identity, a more coherent regional development, safety, spatial planning and sustainable mobility, improved quality of the environment and adequate municipal .
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Document Title	Objectives
Spatial Development Strategy of Slovenia	<p>1 Rational and effective spatial development</p> <p>1.1 To guide activities with spatial impact so as to produce maximum positive effects towards a spatially balanced and economically efficient development, social integration, and the quality of the natural and living environment.</p> <p>1.2 To ensure rational land use and the safety of the population through appropriate planning, multipurpose use and the linking of sectors.</p> <p>1.3 To improve situations involving negative spatial development trends by taking spatial and environmental measures.</p> <p>2 Polycentric development of the network of cities, towns and other settlements</p> <p>2.1 To promote the development of urban centres with national and regional significance as the centres of regional territories.</p> <p>2.2 To encourage the functional and infrastructural integration of cities, towns and other settlements.</p> <p>2.3 To ensure the interconnection of urban settlements with their hinterland through more efficient mobility supported by public transport.</p> <p>3 Increased competitiveness of Slovenian towns in Europe</p> <p>3.1 To develop regional development zones for production activities and services.</p> <p>3.2 To effectively distribute activities in settlements, taking into consideration location-related potentials and restrictions.</p> <p>3.3 To ensure an adequate number of various dwellings in urban settlements.</p> <p>4 High-quality development and attractiveness of cities, towns and other settlements</p> <p>4.1 Safe, socially equitable, vital, healthy and well managed towns and other settlements.</p> <p>4.2 To ensure the quality of the living environment through the integration of cultural heritage in the planning, restructuring and revitalization of towns and other settlements.</p> <p>4.3 To ensure the quality of the living environment through the appropriate and rational provision of infrastructure, a well-developed network of economic activities and services, and access to the social services.</p>

4.4 To ensure adequate water supply for the population throughout the entire Slovenian territory.

4.5 To ensure the protection of people, property, cultural heritage and the environment through appropriate protection against natural and other disasters.

5 Harmonious development of areas with common spatial development characteristics

5.1 Harmonious development of regions.

5.2 Cooperation between urban and other regions along the border.

5.3 Harmonious development of other areas with similar or common development opportunities and/or problems (coastal and mountainous, protected and planned to be protected areas, threatened by natural processes, wider urban areas, etc.).

6 Complementarity of rural and urban area functions

6.1 To exploit the spatial potential of the countryside to develop varied economic activities in rural areas.

6.2 To complement the urban and rural functions by developing complementary activities.

7 Integration of infrastructure corridors with the European infrastructure systems

7.1 Improved links between the transport infrastructure networks and the European transport corridors.

7.2 Improved interconnection of electrical and other energy distribution networks with the networks of neighbouring countries.

7.3 To improve telecommunication networks by ensuring complete national coverage and the provision of links to the international telecommunication networks.

8 Prudent use of natural resources

8.1 Economical and multipurpose use of land and resources.

8.2 Appropriate land use for urbanization and the control of the enlargement of urban areas.

8.3 Conservation of production potential of soil for agricultural use.

8.4 Balanced supply with raw mineral resources.

8.5 To distribute activities so as to ensure balance between the possibilities of supply and the demand for water.

8.6 To encourage the use of renewable resources where this is environmentally acceptable.

9 Spatial development harmonized with spatial limitations

9.1 To steer spatial development away from areas threatened by natural and other disasters.

9.2 To redirect the existing activities away from areas threatened by natural and other disasters, or to improve protection against the consequences of such events.

10 Cultural diversity as the foundation of the national spatial identity

10.1 To promote the conservation and development of cultural diversity as the foundation of high quality national spatial identity, high-quality living environment, and social integration.

10.2 To ensure access to heritage sites and areas and consequently enhance their identification, educational and economic potentials, and their sustainable use.

11 Nature conservation

11.1 To encourage the conservation of biodiversity, natural values and natural processes as the essential components of a high-quality natural environment.

	<p>11.2 To ensure appropriate integration of biodiversity and natural values in natural resources and spatial planning.</p> <p>11.3 To establish a network of special conservation areas and protected areas.</p> <p>12 Environmental protection</p> <p>12.1 To integrate individual components of environmental protection in the planning of the spatial development of activities.</p> <p>12.2 To ensure the provision of public utilities in existing and new plots of building land (water supply, sewage, heating and air-conditioning systems).</p> <p>12.3 Rational management of municipal and other waste.</p>
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Document Title	Area	Objectives
Resolution on National Environmental Action Plan 2005–2012	Climate change	<p>An 8% reduction of greenhouse gas emissions in the period 2008–2012 by reference to 1986, among other things, with the achievement of the following sectoral aims:</p> <ul style="list-style-type: none"> - 12% share of renewable energy sources in total energy supply of the country by 2010; - reduction in energy intensity (for 30% by 2015 in comparison to 2000); - 2% share of bio-fuel in transport by 2005 and 5.75% by 2010; - 16% share of CHP in electricity generation by 2012; - 30% lower energy consumption in new buildings and possible reduction in energy consumption of the public sector by 15%. (Greenhouse Gas Emissions Reduction Operational Programmes)
	Nature and biodiversity	<p>Preservation of high biodiversity level and stopping the decline in biodiversity by 2010:</p> <ul style="list-style-type: none"> - maintaining or the achievement of favourable status of endangered species and habitat types; - maintaining or the achievement of favourable status (extent and quality) of species and habitat types for which areas were determined important for the preservation of biodiversity (ecologically significant areas, Natura 2000 areas, Ramsar localities); - efficient and harmonised preservation of nature in protected areas through management plans and other measures; - higher level of handling wild animal species; - ensuring sustainable use of biodiversity elements and co-natural interference with natural environment.
	Protection of natural values	<ul style="list-style-type: none"> - Maintenance of features for which the parts of nature have been defined as a natural value of a certain type and also all other features to the maximum extent; - recovery of damaged or destroyed natural values; - ensuring the use of natural values in a way that does not endanger them; - ensuring ex-situ protection of natural values which preservation in-situ is not possible.
	Quality of life	<p>Contribute to the high level of the quality of life and social welfare of citizens by ensuring the environment in which the pollution level does not impact human health and the environment and by promotion of sustainable urban development.</p>

	<p>Water protection</p> <p>Water use</p> <p>Water regulation</p>	<p>Good water status by 2015:</p> <ul style="list-style-type: none"> - achieving an improvement in the quality status of groundwater (lower content of nitrates in groundwater and all aquifers and a lower share of measurement places where the limit values are often (25% – 30%) or very often (over 50%) exceeded and the achievement of limit values of nitrates in drinking water in line with drinking water regulation; - achieving an improvement groundwater status and achieving limit values for pesticides in drinking water and drinking water sources in accordance with drinking water regulation; - reducing the risk of pesticides impacting on the environment and aquatic environment; - improve the control of the use of pesticides; - replacement of hazardous active pesticide components with less dangerous ones; - promotion of agriculture using less or no pesticides; - transparent system of monitoring and reporting on the attainment of objectives and development of appropriate indicators; - ensuring appropriate collecting and treatment of waste water; - termination or gradual elimination of emissions discharge and leakage of priority hazardous substances; - prevention of pollution or other types of loading that could impair the quantity and wholesomeness of water bodies or their parts utilised for abstraction or intended for drinking water supply or production of beverages; - preserving the quality of bathing waters and preventing pollution or other types of loading that could impact on the status of water bodies or their parts designated as bathing water areas or the wholesomeness of bathing water in bathing water areas; - maintaining the water quality in order to support the life of important species of freshwater fish; - maintaining the water quality in order to support the life and growth of marine bivalves and gastropods; - protection and preservation of marine environment. <p>Ensuring sufficient volume of water intended for the supply of drinking water and establishment of instruments for setting the economic price of water.</p> <p>Improvement in the availability of water for use and the status of water and associated ecosystems.</p> <p>Decrease in flood risk.</p> <hr/> <p>Achieving limit or target values in particular areas (4 areas and 2 populated areas – agglomerations) for:</p> <ul style="list-style-type: none"> - NO_x by 2010, - SO₂ and PM10 by 2005, - NO₂ and Pb by 2010, - CO by 2005, - Benzene and ozone by 2010. <p>Decrease in national emissions of SO₂, NO_x, HOS and NH₃ by 2010:</p> <ul style="list-style-type: none"> - SO₂ – from 71 kt in 2002 to 27 kt by 2010, - NO_x – from 60 kt in 2002 to 45 kt by 2010, - HOS – from 48 kt to 40 kt by 2010 (38 kt in 2002), - NH₃ – to 20 kt by 2010 (19 kt in 2002).
	<p>Air protection</p>	

	Noise	Definition of noise exposure levels (elaboration of strategic noise maps and planning of noise reduction measures) and public information on noise exposure.
	Urban environment	Establishment of a long-term, uniform and overall policy for the improvement of the quality of life in urban areas with indicators and revival of towns so that they become attractive to citizens, not detrimental to the health and ensuring high quality of life.
	Waste and industrial pollution	<p>Waste management and utilisation of renewable and non-renewable natural resources, thus enabling sustainable production and consumption, reduction of environmental pollution and energy consumption so that the environment carrying capacity is not exceeded:</p> <ul style="list-style-type: none"> - direct at least 65% or more of urban waste to pre-disposal procedures and introduce material utilisation of at least 42% or more of waste (in net amount); - separate all kitchen waste and process them biologically; - process the rest of waste so that the content of total does not exceed 5%; - thermically process the waste where the limit value of 5% TOC cannot be achieved by other procedures and those organic waste where such processing is requisite; - reduce the amount of disposed biodegradable waste from 47% of total waste to 16% by 2013 or 2015, or on average 5% per year; - reduce waste generation potential and greenhouse gas emissions for 1,162 kt CO₂ equivalents by 2012; - continue the trend of reducing hazardous waste generation, namely from 5% to 10% yearly; - continue the trend of reducing hazardous waste generation, namely from 5% to 10% yearly; - improvement and rationalization of hazardous waste management by means of a more efficient utilisation of local capacities and the establishment and functioning of a network of facilities and devices, i.e. hazardous waste management centres;
	Waste	
	Hazardous waste	<ul style="list-style-type: none"> - if there is a lack of local capacities, ensure the final disposal of hazardous waste within the EU infrastructure; - achieve the collection of at least 1 kg of hazardous fractions per citizen per year during the following years within the framework of public waste management services;

	Urban waste	<ul style="list-style-type: none"> - setting up collection points for separated fractions of urban waste for every 500 inhabitants in agglomerations; - setting up collection centres for separated fractions of urban waste in every municipality as a rule, in each agglomeration with more than 8,000 inhabitants and in large agglomerations for every 80,000 inhabitants; - setting up collection points for hazardous fractions of urban waste in every agglomeration with more than 25,000 inhabitants and in larger agglomerations for every 60,000 inhabitants; - establishment of a supplementary system for the collection of separated urban waste fractions by means of mobile collection facilities; - establishment of a collection system for catering and household biodegradable kitchen waste and its biological treatment; - ensuring biological treatment of household biodegradable kitchen waste in private composting boxes and small composting plants in agglomerations with more than 10 inhabitants/ha and more than 500 inhabitants; collecting and ensuring biological treatment in more densely populated areas and larger areas;
	Landfills	<p>Rehabilitation of urban waste landfills which will, according to regional urban waste management concepts, close by 2008 and rehabilitation of other burdens.</p>
	Building waste	<p>Establishment and functioning of an efficient system of building waste management (by 2008).</p>
	End-of-life vehicles	<ul style="list-style-type: none"> - Establishment of a uniform collection system in the whole territory of Slovenia and 100% recovery of end-of-life vehicles; - achieve the reuse, processing and recycling rates (85% by the end of 2006 and 95% by the end of 2014) and elimination of old burdens; - appropriate hazardous waste management.
	End-of-life tyres	<ul style="list-style-type: none"> - Establishment of a uniform end-of-life tyres collection system in the whole territory of Slovenia; - preventing the unsuitable dumping; - ensuring at the same time various possibilities of processing and removal.
	Electrical and electronic equipment	<ul style="list-style-type: none"> - Establishment of a system for the collection of waste electrical and electronic equipment in the whole territory of Slovenia, including the upgrading of the system for the collection of separated waste fractions; - separation of hazardous waste and appropriate treatment; - collect at least 4 kg per inhabitant/year; - achieve the reuse, processing and recycling rates by 2007, namely, 50% for small household utensils and 75% for large household appliances.
	Industrial pollution	<ul style="list-style-type: none"> - Reduction of environmental pollution and energy consumption in large industrial plants; - preventing large disasters due to hazardous substances and reducing their impacts.

2.1.4 In the Context of South Primorska Development Documents

Document Title	Objectives
Regional Development Programme of South Primorska 2007–2013	<p>Long-term objectives of the region</p> <ol style="list-style-type: none">1. By the end of 2013, the region will have increased the value added per inhabitant to EUR 20,000 and thus reduce the lagging behind the neighbouring region of Friuli-Venezia Giulia in Italy.2. By the end of 2013, the region will have established the basic environmental infrastructure for waste management, waste water treatment, water supply and sustainable mobility. <hr/> <p>Economy</p> <ol style="list-style-type: none">1. Higher added value per unit of product/service.2. Higher level of employment. <p>Human resources</p> <ol style="list-style-type: none">1. Adaptation of education and research to the needs of the economy2. Provision of quality social services.3. Knowledge-based society for innovativeness and sustainable development. <p>Rural areas, agriculture, fisheries and forestry</p> <ol style="list-style-type: none">1. Higher added value per unit of product/service.2. Preserved number of population in rural areas.3. Rural development based on sustainable agriculture, forestry and tourism. <p>Environment and environmental infrastructure</p> <ol style="list-style-type: none">1. Reduced impacts on the environment and nature.2. Efficient social services.3. Regional support activities.4. Joint solving of the tasks of regional significance.

3. CHARACTERISTICS OF THE REGION

3.1 SIZE AND POSITION

The region of South Primorska covers an area of 1,524 km², which is 7.5% of the Slovenian territory and its inhabitants account for 6% of the country's total population. The region comprises the municipalities of Slovenian Istra – Koper, Izola and Piran, and the municipalities of Kras and Brkini – Sežana, Divača, Hrpelje-Kozina, Komen and Ilirska Bistrica. The municipalities make up the Obalno-kraška statistical region, apart from the Municipality of Ilirska Bistrica that falls within the Notranjsko-kraška statistical region.

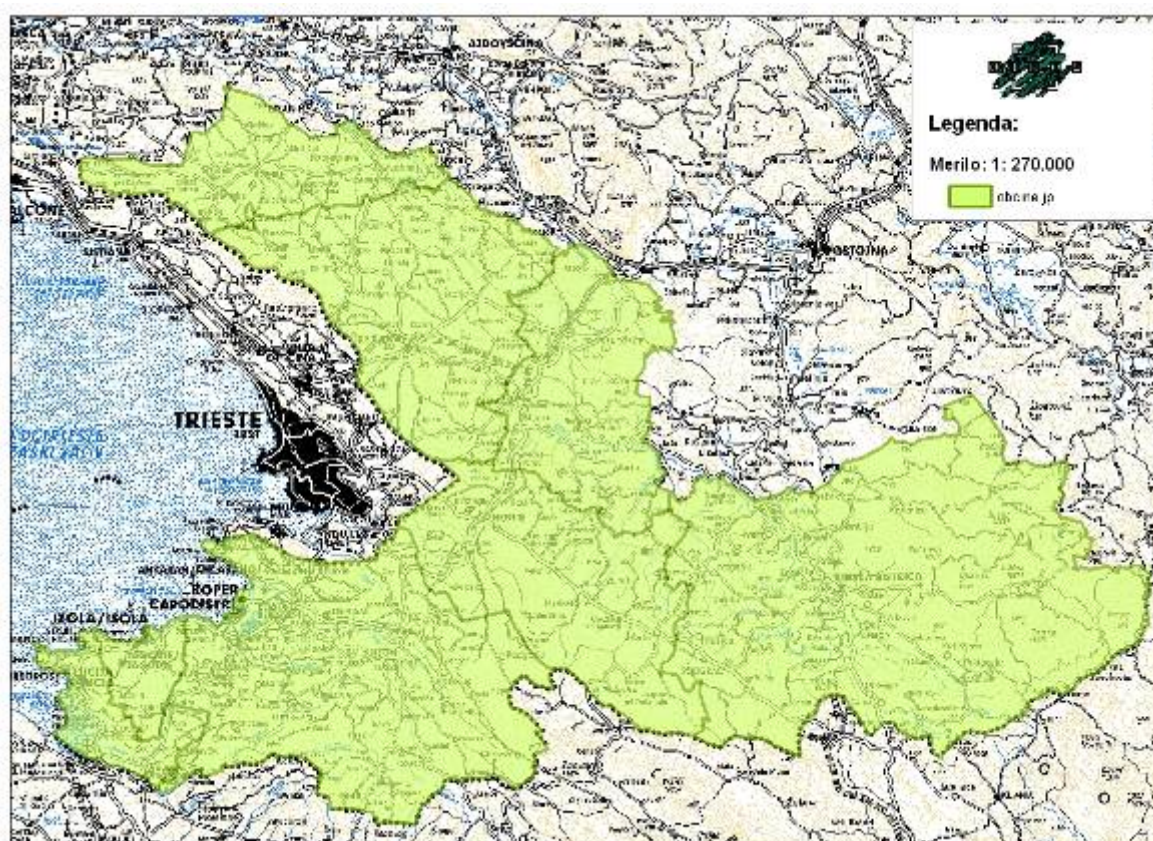


Figure 1: The region of South Primorska

The region occupies the southwest part of Slovenia and it borders with Italy and Croatia. At the regional level, South Primorska borders with Friuli-Venezia Giulia to the west and with Croatian Counties of Istra and Primorje-Gorski Kotar to the south. Within the frontiers of Slovenia, South Primorska borders with Goriška region to the north and with Notranjsko-kraška region to the east.

In comparison with other statistical regions in Slovenia, the region of South Primorska is small; however, according to different socio-economic indicators, it is close to Slovenian average or even above it. The region' population density is below average as it reaches only 80% of Slovenian density, but it is by far the highest in its coastal part where it is more than twice the average density in the region. The Kras area with 34 inhabitants per km² and the Municipality of Ilirska Bistrica with 30 inhabitants per km² are among the most sparsely populated areas in Slovenia.



Figure 2: South Primorska and the neighbouring regions
(Source: Eurogeographics, 2005)

The main natural characteristics of the region are the alternation of flysch and limestone landscapes, sub-Mediterranean climate and, in particular, its maritime position, which allowed for the development of tourism and transport. Namely, it is the only Slovenian region lying by the sea and with its 46 km of coast, it represents a certain “window to the world”. Closely built villages are a typical settlement pattern. During the last decades, littoralization – a process of concentration of the population and economic activities on the coastal strip – is becoming an increasingly distinctive trend. The region may be divided into three parts: the coastal part or Slovenian Istra, Kras and Brkini. These areas differ from each other in their natural, social and environmental features, which will be pointed out where necessary hereafter.

3.2 KEY DEMOGRAPHIC TRENDS

- Population growth in the region is above the Slovenian average, which is mainly the result of extensive immigration. However, the natural growth is constantly negative, which is in no way favourable from the demographic point of view.
- The number of inhabitants increases faster in the coastal part of South Primorska than in the rear areas, which confirms the littoralization phenomenon – settlement pressure on coastal areas.
- The population of South Primorska is ageing, especially in the Kras and Brkini areas. According to the demographic forecast, the share of young people under 15 years of age will drop to 12.6% by 2014 and the share of working age population will be 70.5%, which does not imply considerable change in view of the present situation. It seems that such demographic trends will continue, while the gap between the coastal and the Kras-Brkini parts will widen.
- According to the demographic trends forecast for Obalno-kraška statistical region, it is expected that the number of population will fall, while unfavourable age structure and ageing of the population will continue. In 2002, the projections of demographic development were calculated for the period from 2001 to 2022 (Dr. Lojze Gosar: Demographic Projections for South Primorska Region). The population projection on the basis of 1999 birth rate coefficient foresees a considerable fall in the number of population, from 115,420 in 2001 to 101,423 in

2002 (index 87.9). At the 1999 birth rate coefficient, the 2001 number of population can be maintained only by constant and strong immigration. Preservation of the number of population on the basis of natural growth would be possible also at the birth rate coefficient recorded in the region in 1980. On the assumption of the 1999 birth rate coefficient and no immigration, the index of population ageing would also rise (in individual municipalities, the index ranged from 174 (Komen) to 207 (Izola)).

- According to the demographic projections for the Obalno-kraška statistical region, the trend of longer life expectancy will continue. As the values for South Primorska do not differ much, it can be expected that in various scenarios the life expectancy in 2025 will be between 85 and 85.9 years for women and between 76.6 and 78 years for men.
- The educational level of economically active population is improving and the number of students is growing constantly. The Obalno-kraška statistical region has an above average number of undergraduate students. In the period from 1991 to 2000, the share of students in the generation of 20- to 24-year olds grew the fastest (beside the Notranjsko-kraška statistical region) in this region

INDICATORS¹

- **Population density/km²**
- **Number of persons per household**
- **Ageing index**
- **Number of students per 1,000 inhabitants**
- **Percentage of population with higher and high education**
- **Percentage of population with access to Internet**

3.3 KEY ECONOMIC TRENDS

- On assumption that the values for South Primorska do not differ much from the data valid for the Obalno-kraška statistical region, it can be ascertained that the GDP exceeds the Slovenian average and that it has been rising again after a short downturn period.
- South Primorska demonstrates a strong orientation towards service sector (trade, transport, real estate, renting and business activities, tourism), as a good three-quarters of gross value added is generated by the service sector, followed in proportion by industry, building industry and agriculture.
- The rate of formal (registered) employment, as also the number of jobs, are growing even faster than the country's average. Employment is strengthening in the service sector (particularly in the coastal municipalities) and it can be expected that employment in service will grow faster while falling in agriculture, especially in the area of Kras and Ilirska Bistrica.
- The region of South Primorska has a below-average rate of registered unemployment and structural unemployment has also decreased a little after 2001. There is a lack especially of jobs for highly educated job seekers. The share of women among the unemployed population has fallen below the Slovenian average and is still falling. The percentage of young job seekers (up to 25 years of age) is falling at a lower pace than on average in Slovenia and the share of the unemployed of over 40 years of age is still above the average.
- The economic power of the population of South Primorska, measured by the basis for income tax per inhabitant, exceeds the Slovenian average and is growing. The amount of the gross basis for income tax per inhabitant is above the average; however the difference with the Slovenian average is tending to reduce. From 1996 to 2005, there was a constant growth of average gross salary in all municipalities of South Primorska, but the average gross salary is still below the Slovenian average.
- There is a large disparity between the operation of companies in the municipalities of Slovenian Istra and the municipalities of Kras and Brkini. Although the business performance of companies in the Kras area is worse than the results of companies in the coastal municipalities, some indicators show that they are improving. 80% of companies operate in coastal municipalities and they employ 77% of all workers.

¹ The values of indicators are given in annexed tables. In this space, only a list of selected indicators is indicated.

- The number of employees in South Primorska companies is falling for a long period of time, notably because the companies are smaller in size than on average in Slovenia. Measured according to the assets per employee, the region exceeds the Slovenian average and the companies operate with profit. In general, both the economy of operation and the economic strength of South Primorska are below the Slovenian average, which also applies to the investment activity. The region demonstrates its export orientation by an above-average share of net revenue from exports. However, the export orientation is declining in the coastal part and increasing in the rear parts. There is a trend of strong concentration of economic activities in the coastal municipalities of South Primorska, which is especially true of the Municipality of Koper.
- The investment activity of manufacturing companies in South Primorska, measured by the percentage of investment expenditure in assets, is above average if compared with the investment activity of all companies in South Primorska, but at the same time under the average of the Slovenian economy.
- Labour productivity (value added per employee) calculated for the whole South Primorska amounted to SIT 6,966,000 in 2004 and it is above the Slovenian average (6,675,000). The differences in productivity between the economic sectors and also between the municipalities are typical. The highest labour productivity has been recorded in manufacturing, while the labour productivity in catering and tourism is below the regional average. Between the municipalities, the labour productivity is highest in the Municipality of Koper and the lowest in the Municipality of Divača.
- The region is very attractive for various spatial investments. The main economic activity, which also has the greatest aspiration for land, is tourism. Locating of new activities has already been causing conflicts between various land users.
- Tourism trends:
 - highly developed and concentrated, mass tourism on the coast;
 - increasing number of tourists and overnight stays.;
 - strong but inadequately emphasized natural and landscape potentials in the area of Kras, exploited almost exclusively only in three places – Lipica, Štanjel, Škocjanske jame;
 - the areas of smaller potential and the areas in the Municipality of Ilirska Bistrica, Brkini and the rear parts of Slovenian Istra with weakly or not at all developed tourism and recreational infrastructure.

INDICATORS

- **GDP per inhabitant (in EUR)**
- **Labour productivity (value added per employee in SIT 1,000)**
- **Basis for income tax per inhabitant**
- **Average gross earnings**
- **Economically active population**
- **Number of companies by municipalities**
- **Structure and number of business entities by activity**
- **Size of companies by sector**
- **Productivity by sector (value added per employee in SIT 1,000)**
- **Investment activity by sector (net investment in SIT 1,000)**
- **Tourist arrivals**
- **Number of tourist beds**
- **Number of overnight stays**
- **Occupation of accommodation facilities**
- **Average length of stay (in days)**
- **Beach area per bather (in m²)**
- **Satisfaction of the inhabitants with tourism effects**
- **Satisfaction of tourists**
- **Number of catering establishments**

3.4 KEY OBSERVATIONS ON THE USE OF PHYSICAL SPACE

3.4.1 Settlement and Urban Network

- There is a well-organised urban network on the one side and unbalanced urban system with large concentration in the area of Slovenian Istra and a lack of suitable centres in the area of the Municipality of Ilirska Bistrica.
- Various activities and infrastructural development heap up on the coastal strip of Slovenian Istra which is giving rise to an ever-greater inflow of population and the aspiration for the construction of residential and other buildings. With regard to the whole region, this part is really small in size. Other, significantly larger parts comprising the rear areas of the coast in Slovenian Istra, Kras and Brkini are confronted with many structural problems.
- Good accessibility of larger urban centres and the connection of the region with other regions (motorway), worse access to further away rural areas (bad regional and local connections, poorly maintained roads).
- Developed urban centres (especially in Slovenian Istra), poor communication and cooperation between urban and rural areas.
- Depopulation areas in further away parts of Kras and Brkini.
- Growth of dispersed settlement – extension of settlements into the countryside, while there is unused space capacity within the settlements (rehabilitation of degraded urban areas, reurbanization), wasteful use of space, low population density of new settlement areas.
- Planned structuring of the use of physical space: weak intermingling of uses.
- Emergence of shopping centres with large parking lots outside town centres.
- Large public investment into road network and municipal infrastructure in peripheral areas, which on the one side facilitates rural development and on the other encourages dispersed settlement.
- Under-investment into the existing urban centres and larger settlements, which results in the decrease in the quality of life in urban centres (social stratification, environmental problems: noise, reduced trafficability (standing traffic), removal of functions and activities to the outskirts, worse housing stock, etc.).
- Real estate in South Primorska is among the most expensive in Slovenia, its price rising constantly due to the demand for holiday homes. Demand for and the prices of real estate vary significantly between Slovenian Istra and the Kras/Brkini part. The number of building permits issued is increasing.²
- Due to high prices, appropriate housing is inaccessible to the inhabitants.

INDICATORS

- **% of built-up areas**
- **Population density in urbanized areas (inhabitants/ha)**
- **Average plot price per m²**
- **Average real estate price per m²**
- **Number of dwellings**
- **Number of holiday homes and apartments**
- **Number of building permits issued**

3.4.2 Transport

- Due to the geographical situation and the location on the 5th European Traffic Corridor, South Primorska is affected by strong traffic flows. The present traffic infrastructure, consisting of the road network, railway network, the Port of Koper and the Portorož Airport at Sečovelje, is in general well developed.
- In the last decade, the **motorway network** was completed to a large extent and connected to the Italian network; in the following period, within the framework of the National Programme for

² The analysis of real estate market situation is given in Annex.

the Construction of Motorways, the area will be connected through the motorway network also with Croatia (sections Jelšane–Ilirska Bistrica–Postojna/Divača and Koper–Dragonja) and towards Trieste (Divača/Postojna–Reka). The section Koper–Izola–Lucija, where at present the traffic conditions are very critical, will also be finished.

- Passenger transport is based chiefly on the use of personal vehicles, as suggested by the number of cars per 1,000 inhabitants by which the region is ranked first in Slovenia.
- The road network is especially congested in the coastal part; during the summer period and at weekends, road congestions occur very often, as the average daily traffic (ADT) in some sections is 30,000 vehicles/day.
- The connection function of the coastal road between Koper and Izola is in conflict with other functions, such as for example functional and recreational (cyclists, pedestrians) connections.
- Parking represents a major problem in urban centres on the coast. Even outside the tourist season, the parking lots are fully occupied, while the need for parking spaces increases so much in summer that this becomes the main hindrance to the accessibility of particular places and areas.
- The environmental impacts of car traffic, such as air pollution, noise and dispersed settlement, are becoming increasingly evident.
- Despite the well-developed road network, there are still some areas in the region where the road network is underdeveloped.
- **Public passenger transport** is poorly developed and does not represent an attractive alternative; the system is not connected, transport is slow, uncomfortable and unreliable.
- In the Kras area, there is a relatively large number of regional roads, except in its southern part (Brjkini and Matarsko podolje) where the central traffic route is the G1-7 main road. In addition to it there are only two transversal roads in this area: Obrov–Prem and Obrov–Vodice. The G1-7 road connects Italy and Croatia; freight transport is rerouted to this road, which additionally contributes to its congestion, especially during the tourist season. Over-congestion of this road is disputed also with regard to the protection of water resources.
- With the expected development of the town of Ilirska Bistrica, the G1-6 main road, which is also congested with freight and passenger transport, will gain in importance. When the Jelšane–Ilirska Bistrica–Postojna/Divača motorway section is constructed, freight transport will be rerouted to it and prohibited on the G1-6 road, so that upon the accession of Croatia to the UE this road will become particularly important as a tourist and less congested connection.
- In the northern part of the region there are mainly regional roads of 3rd class which star-like connections are at Komen and Dutovlje. Maintenance works (overlaying, discharge of meteoric water, regulation of gullies and other drainage facilities, restoration of retaining walls) are not carried out regularly, in places side road connections to main roads are dangerous, some sections are unclear and narrow, with poor technical elements. Transport infrastructure is weak also in some other parts of the region (eastern part of the Municipality of Ilirska Bistrica, which is largely covered in woods and uninhabited, and the hinterlands of Slovenian Istra).
- The traffic hubs and combined traffic terminals (Koper, Sežana, Divača, Ilirska Bistrica) are poorly developed and do not meet the present and future needs. The analysis of the traffic capacity of main and regional roads in the direction of the future motorway (Postojna/Divača–Ilirska Bistrica–Jelšane) and the Koper–Dragonja high-speed road indicates that traffic conditions are difficult and even critical as the average daily traffic (ADT) in some sections amounts to almost 30,000 vehicles/day (the section through Ilirska Bistrica – 11,000 vehicles/day).
- The existing **railway lines** no longer meet the modern transport requirements as regards higher speed, higher frequency of trains, improved reliability and predictability and higher quality of services in passenger and freight transport. Unsuitability of the present railway lines reflects also in frequent level crossings as well as their capacity and other parameters. The main railway line leading to the coast finishes in two dead ends, in town and the Port of Koper).
- **Cycling connections** in the region are also poorly arranged. Cycle tracks are partly regulated in the area of Kras along the existing roads with less traffic loading. In some parts of the region cycling infrastructure is planned, particularly on the narrow coastal strip and its hinterlands and the Snežnik mountain range.

- In spite of its location on the shortest route to the centre of Europe and its logistics services, the **Port of Koper** does not offer enough to the partners from Slovenia and abroad regarding the establishment of overseas economic links and trade flows. The role of the harbour in the development of clean, safe and efficient European transport system has not been exploited as this would require better port facilities, efficiency of harbour and quayside services and intermodal connections to inland transport networks.
- The opportunities for the development of maritime transport, especially the maritime passenger transport, are underexploited. In order to promote the public maritime passenger transport in Izola, Piran and Portorož, the present harbours should be developed and upgraded. The network of marinas, servicing arrangements and more appropriate connections of maritime infrastructure to other transport networks have not been clearly defined.
- The present passenger terminal of the Portorož Airport at Sečovelje and the airport infrastructure should be progressively upgraded, but within the existing airport limits and in accordance with the restrictions arising from the requirements of nature conservation and the protection of cultural heritage of the Sečovelje Saltpans.

INDICATORS

- **Number of cars per 1,000 inhabitants**
- **ADT in selected sections**
- **Passengers carried in public transport**
- **Harbour traffic of goods**
- **Cargo structure of the Port of Koper**
- **Goods carried by railways (traffic of goods at railway stations in t)**
- **Number of moorings in marinas**

3.4.3 Municipal Infrastructure

Water supply

- Due to natural features of Kras and Slovenian Istra, the sources of drinking water are relatively scarce; therefore, integrated planning of drinking water resources management is requisite. The existing water resources in the Kras area are suitable, however, they are exposed to pollution because of karstic characteristics and do not ensure adequate supply of the population with drinking water. The Rižana River basin as a source of drinking water for Slovenian Istra (in addition to the sources of the Dragonja River in Croatia) is not abundant enough and it is distinctly exposed to pollution. Therefore, additional water resources should be ensured to cover the needs of the whole region. The proposed water resource of Padež–Suhorka has a potential to meet all needs for water in the region; however, the need to guarantee drinking water supply must be harmonised with the protective restrictions regarding the preservation of the Reka River regime and the state of the Škocjanske jame environment.
- Protection of water resources has been formally implemented, but there is no control over the implementation of restrictions regarding the activities in these areas. For this reason, water resources are constantly exposed to pollution. The territories of some municipalities largely comprise water protection areas, resulting in considerable limitations to spatial and economic development. The principal activity in water protection areas is agriculture which does not have enough regard to the protection requirements in water protection areas and for water resources.
- Three main water systems ensure water supply for the major part of the region, while the areas of dispersed settlement (Brkini, rear areas of Slovenian Istra) are supplied through local water distribution systems of unsuitable quality and quantity, as well as inappropriate management. There is a distinctive disparity between the water supply of central settlements and their water consumption and water supply and consumption of other, especially hinterland areas. It is characteristic of these areas that they lack water supply networks and facilities, the cost of water supply is high and the construction and technical state of distribution systems is inadequate.
- Water consumption in Slovenian Istra is excessive, especially due to the need for water in summer because of tourism and the loss of water in pipes. The measures for reduction of water consumption are not implemented and are more the result of water shortage than

planned measures. At present, water consumption is quite stabilised and water loss in pipes is less than one third (29%).

Waste water treatment

- Only a small part of the region – big settlements on the coast and larger settlements in the hinterland – is provided with regulated sewage network terminating with waste water treatment plant. The highest level of connection to sewage network is in the coastal areas and the lowest in the Kras area. The rest of waste water is discharged through unregulated individual systems or through the systems that do not end in waste water treatment plant.
- Unregulated discharge of waste water is one of the main reasons for environmental pollution, which is especially evident in Kras due to its natural characteristics, and in the coastal area because of direct pollution of the coastal sea. Due to dispersed settlement, the systems are separated and the level of treatment at waste water treatment plant is low. The cost of municipal infrastructure in these areas is much higher than normal. Individual systems are inadequate and not registered, so that the real level of pollution cannot be assessed.
- The entire region of South Primorska is defined as a very vulnerable area and, therefore, more stringent criteria apply to equipping the agglomerations with waste water treatment systems. The extent of equipment of agglomerations with more than 10,000 PE with adequate sewage systems is quite large, while at present the suitability of facilities is low. Small agglomerations (from 2,000 PE to 10,000 PE) are fairly well equipped with treatment plants; however, the inadequate sewage systems remain a problem.
- The municipalities have adopted operational programmes for waste water treatment, but their consistent implementation is questionable due to the lack of financial resources.

Energy supply

- The situation with energy supply in the region is satisfactory (electric energy, in particular), but a disturbing fact is that there is no comprehensive energy concept for the region or its parts, with the result that the basis for efficient energy use is not defined and development plans elaborated to impose strategic decisions and action programmes.
- Supply with electric energy is adequate, as important (international) high voltage electrical transmission lines cross the region. The region is thus connected to Slovenian electrical power system through Divača distribution transformer station while at the same time it is connected to Italian and Croatian high voltage electrical power network. As regards the supply of settlements, only small hamlets in remote areas have low-level supply, while large settlements are adequately supplied through the electric energy distribution network.
- The region is still not provided with gas network although some settlements have local gas networks (liquefied petroleum gas), which will be eventually connected to long-distance gas network.
- The facilities for storage of the security stock of oil products, which are located in the wider area of the Port of Koper, ensure a relative independence in the supply with this kind of energy.
- Renewable energy sources, particularly solar energy, which could represent a significant source of energy in the coastal area, are underused and there are no pilot projects in this field. Due to a large forest potential, wood biomass is an important renewable energy source. Other alternative sources are less prospective, as they are related to exceptional spatial conflict (wind power plants) or may have a relatively low potential (geothermic sources, small power plants).

Telecommunication

- The main telecommunication (TC) network is well developed and it represents a skeleton TC network. The long-distance network is connected to the national network of Telekom Slovenia and to the optical connection of Slovenian Railways, power transmission networks and motorway network. The network of telephone switchboards and post offices is well developed and it covers the whole territory of the region, although the regional centres are better equipped than the hinterland due to the dispersed settlement.
- Large settlements have a regulated telecommunication system, especially as regards cable television network and Internet connection services.

- Mobile telecommunication network covers almost the entire region and it ensures an adequate accessibility to telecommunication connections.
- The signal of RTV Slovenia is adequate in most parts of the region; the reception is limited in remote and scattered settlements due to the natural conditions.

Waste management

- Waste management is not fully resolved in the region and it represents one of the largest pollution sources. In general, the landfill sites are unsuitably located, technically inadequate (unsealed, not degasified, subject to inundation, within reach of groundwater, etc.) and all of them are mostly filled up. At present, all municipalities dispose of the waste at reconstructed landfills which will be full in some years or at landfills in the process of rehabilitation or the increase of capacity.
- All inhabitants of the region are involved in waste disposal. The system of separate waste collection has been introduced in all municipalities but, according to the information obtained, it is not particularly successful. Due to irregular data collection, it is difficult to talk about the trends in the quantity of collected urban waste.
- All municipalities in the region acceded to GOJUP South Primorska that was preparing a regional project covering the landfills for surplus waste in the Municipality of Sežana; however, the local community did not support the project and consequently the initiative was adopted to find another location for a common regional landfill.

INDICATORS

- **Water consumption per person per day**
- **% of households connected to public water supply network**
- **% of households connected to sewage network**
- **Volume of collected urban waste**
- **% of recycled waste**

3.4.4 LANDSCAPE

Landscape

- In major part of South Primorska, the man-made environment is an important element of regional identity, which is especially evident in the areas of exceptional landscape and in the areas of complex protection of cultural heritage. In addition to the areas of national identity, stated already in the Spatial Development Strategy of Slovenia (Lipica, Škocjanske jame, a part of Brkini and Matarsko podolje, a part of Bržanija and Movraška dolina; Prem and Suhorje, Kras, the area of Strunjan, Šavrini) and outstanding landscapes, there are some other significant areas defined as the areas of regional identity – Snežnik, Slavnik, Vremščica and the Kras Edge. Most of these areas are known also for exceptional natural qualities and the landscape areas of special quality in South Primorska are:
 - the sea and the seacoast with characteristic relief (e.g. cliffs) and settlement (town centres);
 - distinctive settlement patterns (architecture and urbanism of villages and town centres in Kras and Slovenian Istra);
 - natural elements of classical Kras (characteristic relief and microrelief with shallow soil, sinkholes, surface rocks and thermophile plants (Škocjanske jame, Kras Edge, Vrtača pod Čebulovico) and riparian landscape (the Dragonja River valley);
 - man-made environment (coherence of settlement with natural spatial structure of Kras and Slovenian Istra (Koštabona, Krkavče, Padna, Rožar pri Tinjanu, Šavrini, Prem, Suhorje, Strunjan, Črni Kal–Hrastovlje, Marija Snežna–Podgorski Kras), distinctive structure of wine-growing areas – Sveto pri Komnu, Dutovlje, Tomaj and fruit-growing areas in Brkini and Slovenian Istra, a part of Matarsko podolje; salt pans, Lipica, Izola amphitheatre;
 - contiguous forest land (Snežnik, Slavnik) and the areas of Vremščica and Kras Edge as the areas important for the regional identity and as the are of high natural values.
- Landscape changes result from the construction of large infrastructure facilities (Slovenian Istra and especially the coastal area – transport and tourist infrastructure such as motorways, marinas, harbours) and settlement (increasing building density in the coastal area – tourist

settlements and dispersed building of housing and holiday facilities and auxiliary facilities), as well as the result of the abandonment of agricultural land use manifesting in overgrowing of cultivated land in the whole region and particularly in Kras and Slovenian Istra.

- Great pressure on the space, which may result in considerably changed landscape structure and its identity features, manifests itself through new construction projects in the coastal area (apartments and holiday homes, economic and service activities, infrastructure facilities and transport networks – the coastal road, high-speed railway, the Port of Koper, construction of an artificial island), the construction of wind power plants in the areas of Kras and Ilirska Bistrica (Volovja reber, Kokoška, Vremščica, etc.). Other significant development initiatives, which may affect the landscape features, are the arrangement of golf courses (especially in the Kras area – Lipica, Divača, where natural characteristics are not suitable for such use due to high soil permeability and the lack of water and near the coast) and the construction of water reservoirs (e.g. Padež).
- In this connection, it should be emphasised that there are many large areas of nature preservation in the region and the same applies also to the cultural heritage protection areas and water protection areas, all of which may reduce the economic development of so far insufficiently developed parts of the region, which should be avoided by the introduction of appropriate measures and mechanisms, in particular on national and regional levels.

Tourism and leisure activities

- Due to favourable climate, geostrategic position, natural and cultural values as well as the already established tourist infrastructure, the entire region has great potentials for the development of tourism and leisure activities.
- With the exception of the narrow coastal strip and some important tourist points in Kras (Štanjel, Škocjanske jame, Lipica) these potentials are underused. This applies especially to a large part of Slovenian Istra and the area of Ilirska Bistrica, but also Kras; the reasons for such situation are, in addition to poor organisation and inadequate intersectoral cooperation, unsuitable transport connections and defective management of tourist infrastructure and leisure activities.
- Owing to the attractiveness of the sea and the coast and the exceptional spatial constraints (short coastline, narrow coastal strip, cliffs, already populated and built areas), the coastal strip is affected by evidently excessive and increasing pressure of guests, which brings about also the need for the arrangement of tourist and holiday facilities. The problems are arising also with regard to public infrastructure, the level of water pollution and the overpopulation of the coast; such trends are already reducing the natural potentials of the coastal part of the region. There is no integrated spatial planning concept, which manifests in unsuitable arrangements and land use and poor exploitation of existing potentials (e.g., saltpans, Palace Hotel), New tourist investments (hotels, marinas) are planned almost exclusively on the coastal strip, while there is a lack of complementary tourist infrastructure (e.g., integrated and regulated coastal footpath, higher level of beach regulation).
- In other parts of the region the natural conditions are not used adequately for the purposes of tourism and recreation, e.g. footpaths, cycle tracks, existence of cultural heritage and outstanding natural features, lack of camps for transit visitors (mobile homes, tents). Advantage is not taken of the fact that a significant part of the region boasts with well preserved traditional man-made environment (e.g., vineyards, orchards) which together with natural values (classical karstic features, Kras Edge, forests, mountain ranges, plateaus) and agriculture represents a high-quality environment for farm tourism and excursion programmes. The potentials for health and youth tourism are also not exploited. Under-utilisation of the existing potentials manifests in the unsuitable state of potentially elite tourist facilities (e.g. Palace Hotel, Lipica, Štanjel) as well as in unregulated tourist routes (wine, fruit, tracking, educational, cycling), which are not integrated in a closed-circuit network.
- The opportunities of cross-border and interregional cooperation in the development of tourist offer and marketing of classical karstic features (in Italy and Slovenia) and the sea (Croatia) are also underused.

Agriculture

- In the past, agriculture was the most important economic activity in South Primorska; however, it has lost in significance in most part of the region. In spite of the amelioration of agricultural land in the second half of the 20th century, small plot structure still prevails in the region. Such structure, together with some characteristic forms of production (vineyards, orchards, etc.) creates in some places a man-made environment of exceptional quality, but on the other hand offers poor economic prospects. Good agricultural areas of larger continuous plots are rare, while in many places market-oriented agriculture changes the man-made environment directly due to the measures designed to increase production (enlargement of plots, land improvement, etc.) or indirectly because of the abandonment of farming, which leads to the overgrowing of cultivated land. The loss of agricultural function, as the most important factor in the countryside, and the breakdown of agricultural land results in changed living conditions as well as the settlement morphology and the appearance of man-made environment.
- The classification of land often does not correspond to the actual situation in the field and this may consequently prevent rational urban development.
- Modern approaches to food production (integrated production, ecological agriculture), directed towards sustainable development and the exploitation of special natural conditions (soil, climate, relief), are increasingly gaining importance in the region. Considering the natural structure and climatic situation, the conditions in various parts of the region are suitable for different kinds of farming which development would be reasonable also in the future: wine-growing (Kras, Slovenian Istra), fruit-growing (Brkini, Slovenian Istra), livestock production (Kras – cattle and horse breeding, Slovenian Istra – sheep breeding) and vegetable cultivation or horticulture (Slovenian Istra near the coast). Nevertheless, the region's numerous potentials for agricultural production and other forms of gainful activity remain underexploited (e.g., possibilities for sheep breeding in Slovenian Istra and Kras, vegetable growing, various types of ecological production).
- In Kras and Slovenian Istra, especially on the coastal strip, there is an explicit need for irrigation of agricultural land; the planned water storage at Padež will provide water also for this purpose.
- The analysis of the possibility of agricultural development shows that there are great opportunities for further development of agriculture in South Primorska in conjunction with tourism and recreation and indirectly also with the protection of cultural and natural heritage (farm tourism, thematic paths, educational tourism, renewal of village centres and individual characteristic architectural features, etc.). New development possibilities are opening up for agriculture in nature preservation areas in the form of incentives for ensuring suitable agricultural use in protected areas (ecological production, consideration of the dynamics of natural processes, ensuring a green cover throughout the year, etc.) within the framework of Slovenian Agri-Environmental Programme.
- The problem of greenhouse facilities location.

Forestry

- A large part of the region is covered in woods and forests. The amount of woodlands is increasing due to the abandonment of farming on less favourable land areas. A particularly evident process is the overgrowing of Kras with pine forests resulting in non-indigenous stands in the central part of the region (Kras, Brkini and Slovenian Istra). In the outermost eastern part of the region, the forests are completely different in appearance as vast beech, fir and mixed forests cover wide areas of Snežnik and Javornik massifs.
- As in the rest of Slovenia, sustainable management of forests has been practiced also in this region.
- It is an important issue that this area is subject to a great fire hazard due to dry and hot sub-Mediterranean climate in combination with degraded sites and the vegetation adapted to both. Traffic corridors, in particular the railway, contribute additionally to the fire hazard.

Extraction of mineral resources

- The supply of the region with technical and natural stone is satisfactory (exploitation areas) and the region has significant potentials in long-term supply of mineral resources (exploitation and research areas for technical and natural stone, flysch and clay). Except for the required rehabilitation of abandoned open mining sites or their parts there are no larger problems with the supply of mineral resources in the region.
- The coastal part of South Primorska is of interest as regards the natural stone especially because of the deposits of grey flysch sandstone. Investment initiatives have arisen in the Municipality of Koper for the exploitation at a number of sites (exploitation of natural stone and rehabilitation or agro-amelioration of delineated deposit sites of flysch sandstone). There are significant clay accumulations to the south of Ilirska Bistrica. In Kras, there is an explicit need for long-term extraction of natural stone for the renewal of cultural heritage buildings.
- Salt production remains important as a specific activity of the coastal area.

INDICATORS

- **Land-use structure**
- **% of cultivated land**
- **Size of nature protection areas (landscape and regional parks in km²)**
- **Number of actively managed areas**
- **Size of protected areas of cultural heritage (areas of complex protection of cultural heritage in km²), number of cultural heritage buildings and areas**
- **Size structure of farms**

3.5 KEY OBSERVATIONS ABOUT THE ENVIRONMENT

- A sign of climate change is rising of the sea level along the Slovenian coast, estimated at 1 mm/year. In the next hundred years, greater risk may be expected and more frequent flooding of low-lying parts of coastal towns (Koper, Izola, Piran), particularly where flooding has already been occurring repeatedly every year.
- In the light of expected intensification of maritime transport and nautical tourism, an increasing trend in the content of hydrocarbons in sea sediments can be expected.
- Pollution of the sea with waste waters will continue until the construction of sewage network and waste water treatment plants.
- The situation of water quantity at characteristic flow rates of rivers with direct outflow into the Adriatic Sea indicates that medium flows are falling most markedly; however, the maximum flows are also decreasing. The present conditions point to a reduction of the available water in the region. Additional problems in the provision of adequate quantity of water may result from the change in flow timing observed in the past years, as the periods of high flow in watercourses with rain and rain-snow regimes move to the winter time, while the periods of low flow in summer time are getting longer, thus increasing the risk of long droughts.
- The level of water pollution is especially high in the coastal part due to the high settlement density (residential buildings, holiday and tourist facilities, economic zones) and infrastructure (the Port of Koper, marinas). Most watercourses in the region are not polluted; however, the downstream sections of the Dragonja, Rižana and Reka fall within a lower quality class, which is the result dense settlement and inadequate management of waste water as well as the traffic infrastructure. There is a very clear trend of improving biological and chemical parameters (with the exception of nitrates) in hydrographic basins of Adriatic rivers.
- Pollution of drinking water sources with bacteria can be expected until the construction of sewage network and waste water treatment plants. A high content of heavy metals was determined in sediments of karst springs.
- There is poor flood prevention in some parts of the region in consequence of inadequate regulation of certain torrential streams. In order to secure prevention against high water on agricultural land, regulation was carried out of some watercourses and retention basins built in the past (Mola, Klivnik, Pivol and Triban, and Vanganel Lake in Slovenian Istra).

- With regard to the climatologists' forecasts and the trends in the past decade, droughts can be expected more frequently in the area of South Primorska.
- South Primorska falls within the air pollution level II. Periodically, the permissible values are exceeded, especially as regards the pollutants such as nitrogen oxide (NO₂), particles (PM10) and ozone (O₃). The main air pollution sources are industry, traffic and furnaces. The problem of pollution by ozone and NO_x is becoming increasingly acute and it can be expected that pollution will increase due to local sources (traffic) as well as cross-border pollution.
- In particular areas, significant negative environmental impacts include also high light pollution, which has to be taken into consideration in spatial planning of activities, especially in vulnerable areas from the point of view of the protection of wild animals.
- Traffic is the main source of noise, burdening especially urban and tourist centres.
- In general, biotic diversity is reducing as a rule due to ever-increasing pressures on species and their habitats.
- On the national scale, fire risk to the environment is exceptionally high in the Kras forest management area. The largest forest areas destroyed by fire are in this area.
- Slovenian Istra is among the regions in Slovenia with the lowest earthquake hazard.

INDICATORS

- **Quality of sea water (trophic index)**
- **Concentration of nitrates and phosphates in coastal waters**
- **Quality of bathing water**
- **Length of natural coast**
- **Number of protected habitats and species**

A flow chart of the present conditions in the area, with an emphasis on settlement network, traffic corridors and particular problems arising from the analysis of the situation, is given in the cartographic appendix **Starting situation – settlement network, transport connections and development problems in the region.**

3.6 SPATIAL DEVELOPMENT OF SOUTH PRIMORSKA WITHOUT STRATEGIC ACTION

Potential impacts of the continuation of present development trends by spatial planning segments:

SETTLEMENT (demography, urban network):

- large proportion of old people, reduction in the share of economically active population;
- concentration of activities and population in Slovenian Istra, especially on the coastal strip and partly also in the hilly part of Slovenia Istra;
- migration of the rich to coastal towns (further increase in land and real estate prices) and consequently, reduced accessibility of housing for the young with lower incomes, the purchasing power of the population lags behind the real estate prices;
- further depopulation of the Slovenian Istra hinterland, Kras and the areas in the Municipality of Ilirska Bistrica, urban decay and destruction of architectural heritage, further changes in the use and intended purpose of buildings, transformation of rural settlements into secondary homes;
- continued dispersed building, resulting in increased traffic pressures and poor municipal infrastructure;
- competition between the municipalities with regard to the development of central activities;
- weak cooperation between the municipalities and weak cross-border cooperation (Trieste, Rijeka);
- + reurbanization of coastal town centres, improved living conditions, renewal of housing stock; however, further moving of service activities from town centres to the suburbs;
- + the coastal towns (conurbation) of Koper, Izola and Piran will not develop intensively as the most important regional centres;
- + improved educational level of the population.

ECONOMY:

- continued concentration of activities in the coastal part of Slovenian Istra; the areas of Kras and Brkini lack jobs and the potential for the development of new economic activities which further increases the development disparities in the region;
- transport infrastructure does not meet the needs of the economy;
- high development and concentration, mass tourism on the coast;
- unused economic zones as a result of unsuitable spatial distribution, inadequate equipment, accessibility and weak entrepreneurial potential;
- orientation to tourism, catering, care services for the old in tourist centres of Slovenian Istra, characterised by low labour productivity;
- + in the areas of Kras, Brkini and Ilirska Bistrica, development will occur of various forms of tourism and recreation in natural environment, the areas of natural values and eco-tourism, but the suppliers will remain unlinked and consequently not visible;
- + accelerated development of the Port of Koper into the leading port of the Northern Adriatic;
- + growth of employment rate, income, and investment in service activities.

TRANSPORT:

- worse condition of regional and local roads and, consequently, reduced accessibility to rural settlements;
- orientation to road transport, further growth of traffic flows, resulting in high burdening of the coastal towns and the coastal strip;
- growth of freight transport;
- sustainable mobility modes will become an unattractive alternative;
- no connection between different transport networks;
- + modernization of the railway and construction of the second line between Divača and Koper will be carried out; however, there is a risk that the infrastructure will not be fully utilised and that rerouting of cargo to railways will not succeed completely;
- + highly developed road transport infrastructure (motorway), which will follow the fast economic development of the region, especially on the coastal strip;
- + maritime transport will be carried out primarily in the Port of Koper and the newly built passenger terminal;
- + Portorož Airport will become an important passenger terminal for medium passenger and business airplanes.

INFRASTRUCTURE:

- poor exploitation of renewable energy sources (solar, wind and wood biomass);
- in the field of waste management, the agreement on the construction of the 1st order regional centre will not be reached and waste management will continue on local level (in centres of 3rd order);
- + the Padež–Suhorka water source will ensure adequate supply of drinking water for the whole population in the region; other sources which provide water for the existing water supply systems (the source of the Rižana River, Gradole, Brestovica, Nanos water sources, Bistrica spring) remain in use, but the protection regimes in water protection areas are not implemented consistently;
- + treatment of urban and industrial waste waters will be adequately regulated and in accordance with stringent criteria applied to vulnerable areas.

LAND USE:

- the process of agricultural land overgrowing will take place especially in the areas of Kras and Brkini;
- intensive agricultural production (e.g., vegetables in greenhouses) will be carried out only on economically justifiable areas (best land, near to markets);
- the first areas of agricultural land make rational development of activities impossible;
- great pressure is asserted to meet the needs of tourism and holiday capacities in the coastal area;
- reducing of green space in urban and surrounding areas;
- + numerous and large areas intended for the preservation of nature and the protection of cultural heritage, but which are not managed and protected actively, great pressures on these areas due to the still prevailing opinion that that are merely constraints and not development opportunities,

- + the Padež–Suhorka water source will ensure enough water for irrigation of agricultural land;
- + increase of agricultural land included in ecological production.

ENVIRONMENT:

- the problem of air pollution remains, especially with especially with nitrogen oxide (NO₂), particles (PM10) and ozone (O₃) mainly due to traffic and cross-border pollution;
- increased flood risk in the coastal area resulting from the rising of the sea level and due to inadequate flood prevention measures taken on watercourses;
- overburdening with noise in residential and tourist areas;
- increased burdening of the environment with light;
- further reducing of biotic diversity;
- deterioration in the quality of the sea due to increased maritime traffic;
- more frequent occurrence of agricultural droughts;
- + Improvement in the quality of the sea, surface and underground waters as a result of appropriate waste water management.

4. VISION, OBJECTIVES AND STRATEGY OF SPATIAL DEVELOPMENT OF SOUTH PRIMORSKA

The Conception of Spatial Development of South Primorska sets out common strategic directions, which on the one hand support the implementation of the key objectives and projects of the Regional Development Programme of South Primorska 2007–2013, the Spatial Development Strategy of Slovenia and the Spatial Order of Slovenia and on the other hand, steers municipal activities affecting the competitiveness of the region, the quality of living and the environmental protection as the basic elements of sustainable development. In addition, the Conception of Spatial Development notifies the national development stakeholders about the fundamental interests of the region and the international financial programmes participating financially in the implementation of key regional projects.

The Conception of Spatial Development stems from the fact that South Primorska is a diverse area as regards its socio-economic, natural, cultural and environmental features (Slovenian Istra, Kras, the area of Ilirska Bistrica). Diversity implies differing needs and potentials for the development of particular places and areas of the region.

The proposal of a vision and long-term objectives of spatial development is worked out on the basis of key development trends and spatial planning projection, without strategic action. The spatial development strategy, under the working title “Sustainable Strategy of Spatial Development” has been formulated for the achievement of the set objectives.

4.1 VISION

“The spatial development of South Primorska supports sustainable welfare, equitable distribution of benefits and high quality of life while protecting and strengthening natural, spatial and cultural property.”

4.2 OBJECTIVES OF SPATIAL DEVELOPMENT

1. To increase the competitiveness of the region

- Establishment of competitive cross-border polycentric network of settlements
- Establishment of competitive rural areas with a high quality of life
- Improved internal and external integration of the region

2. To improve the quality of life in the region

- Strengthening of sustainable communities (towns)
- Strengthening the identity and attractiveness of the region
- Sustainable management of natural resources

4.3 SUSTAINABLE SPATIAL DEVELOPMENT STRATEGY

The strategy of sustainable spatial development is based on the cooperation between the municipalities, the State and other partners, and on cross-border cooperation in the following priority areas: promotion of regional development, locating of regionally significant functions and management of protected areas and natural resources. Partnership will play the key role and it will be established on the basis of the Promotion of Balanced Regional Development Act (Regional Council, Regional Development Council, thematic partnerships).

The most important instruments of sustainable development strategy will be as follows:

- economic and regulative municipal instruments: the need should be emphasised for the harmonisation of these two instruments on the regional level in order to achieve specific objectives as well as the development of instruments and the use of all intrinsic potentials;
- harmonised municipal spatial and land policies at the regional level, representing a guaranty of protection of spatially related natural and cultural property and at the same time an instrument for fostering the competitiveness of the region, resulting in development and generation of additional financial resources on the local level;
- partnership between public and private sectors as a promising instrument of sustainable spatial development because it involves many areas where public and private interests meet;
- transparent functioning and public participation in order to timely settlement of conflicts and to motivate the largest possible number of stakeholders on the regional level;
- preliminary evaluations and assessments (such as feasibility studies, cost-benefit analyses, strategic environmental impact assessment, assessment of environmental carrying capacity, etc.) to ensure the compliance with sustainable development, efficient and effective implementation of programmes laid down and timely solving of conflicts;
- cooperation and coordination between municipalities, between municipalities and the State, cooperation with the EU institutions and cooperation and integration with neighbouring regions (notwithstanding the national borders) in the field of project financing and to exchange experience.

5. CONCEPTION, OBJECTIVES AND MEASURES BY SECTORS

5.1 SETTLEMENT

The settlement conception will contribute to the achievement of the following spatial development objectives:

- Establishment of competitive cross-border polycentric network of settlements
- Establishment of competitive rural areas with a high quality of life
- Strengthening of sustainable communities (towns)

Settlement conception

Establishment of cross-border polycentric network of settlements

Harmonious spatial development is based on a polycentric network of settlements, which allows meeting the needs of all communities and the attainment of their development potential within the limits dictated by the environment and the orientation to sustainable development. The key feature of polycentric network of settlements in the region is the establishment of a **three-tier network of settlements**, designed to promote:

- intensive changes in **strategically significant urban centres** through the development of their economic and service role and sustainable development policies, leading to the strengthening of their competitiveness in the broader EU area;
- changes in **more important local centres/settlements** defined as focal points ensuring locally significant development;
- small-scale changes in **other settlements**, directed mainly to the improvement of living conditions in those settlements and the strengthening of sustainable development.

In order to strengthen the competitiveness of towns and settlements or the network of settlements in the broader EU area, it is essential to establish closer cooperation with cross-border cities, in particular Trieste, Gorica, Rijeka and the towns in Croatian Istra.

The conception of the network of settlements is shown in the cartographic appendix. **Settlement.**

According to the Spatial Development Strategy of Slovenia, **strategically significant urban centres in the region** are the following towns/conurbations:

Name of settlement	The role of settlement in the hierarchy of central places – Spatial Development Strategy of Slovenia	The role of settlement in the Conception of Spatial Development of South Primorska
Koper	Centre of international significance	Strategically significant town
Izola	Centre of national significance	Strategically significant town
Piran	Centre of national significance	Strategically significant town
Ilirska Bistrica	Centre of regional significance	Strategically significant town
Sežana	Centre of regional significance	Strategically significant town

Development of strategically significant urban centres

Strategically significant urban centres in the region will:

- strengthen the development of a wide range of economic, commercial and social services by ensuring suitable facilities and land for the development of activities and their integration;
- enhance social cohesion, ensure healthy and safe living environment for all inhabitants by ensuring adequate quality and accessibility of social services (health care, education, culture, spending of leisure time);
- enhance the public transport within conurbation/towns and to settlements/communities within the functional area by the development of adequate traffic infrastructure and the management of traffic flows;
- promote cooperation on the conurbation level and with other municipal centres;
- establish the specialisation within the conurbation;

- as a priority, direct the settlement to unoccupied building land within the settlement areas and in particular to the areas of too low building density, with a purpose to achieve urban compactness and higher urban density;
- ensure rational land use by increasing the urban density;
- implement reurbanization, revitalization of settlement centres (by diversification of activities and social structure, renewal of building heritage, sound management of public areas);
- improve the quality of urban residential environment;
- promote closer cross-border cooperation (particularly with the agglomerations of Trieste and Gorizia (Italy), and Rijeka and the towns in Istra (Croatia)).

Strategically significant urban centres are situated in the influence areas of large neighbouring cities (Udine, Trieste, Gorizia, Rijeka, Pula, Poreč, etc.), which may represent both a threat and an opportunity. Large cross-border cities may provoke the outflow of active population and thus further aggravate the economic conditions and unfavourable demographic situation; moreover, they may cause the outflow of consumers by a larger set of services (e.g., trade, education, cultural services, etc.). On the other hand, however, these cities may represent also an opportunity for strengthening the region's identity, attracting new investments and the development of complementary services also for the population on the other side of the border. Therefore, it is essential to promote accelerated spatial development of strategically significant urban centres in Slovenia in order to ensure the equivalence between Slovenian areas and neighbouring areas by planning efficient urban networks, supporting economic infrastructure, tourist centres and other activities.

It is therefore essential for strategically significant urban centres/conurbations to define in detail in municipal spatial planning documents specific directions regarding the extent of development, spatial conception and strategic investments in infrastructure and other facilities and social services required to support the development and to strengthen their strategic role.

In addition to general criteria, higher infrastructural criteria should be considered for higher level settlements (a regional centre should have at least ten significant activities in its gravitational area):

- recorded daily migration of work force;
- geographical, cultural and economic centre of its gravitational hinterland;
- vocational and/or secondary school and/or a unit of the institution of higher education or faculty;
- hospital;
- network of social services;
- telecommunications centre;
- special libraries and/or indoc centre (also a university library);
- cultural activities (theatre, museum, archive);
- local TV station and press;
- sports and recreation areas and facilities;
- scientific research activity.

Development of more important local centres/settlements

Future development will be, in addition to more important local centres, oriented primarily to those settlements which, on the basis of their role and function analysis, meet the criteria set out below and which are defined as focal points ensuring locally significant development:

- settlements are municipal centres (Hrpolje-Kozina, Komen, Divača);
- settlements with adequate concentration of activities and jobs, or settlements with development potential, employment opportunities and supply facilities;
- settlements providing shopping and cultural, educational, health care and other social services that meet the needs of the settlement and its hinterland, provided there is good accessibility by public transport;
- settlements offering building land for affordable housing;
- settlements with a potential to develop certain functions/services due to their specific features, such as cultural heritage (Štanjel).

Development of small local centres

In addition to the proposed urban network in which priority will be given to the development of the above stated settlements, activities may be directed also to other settlements, where the general criteria for infrastructure or their gravitational areas apply for the definition of local centres:

- a complete primary school;
- community health care centre or health station (primary health care);
- food and assorted goods shop (consumer goods supply);
- drinking water supply, discharge and treatment of waste water, energy supply (municipal infrastructure);
- postal services;
- financial services (bank and savings institution);
- library (general education or school library);
- facilities for local community administration.

Development in local centres will be directed primarily to:

- ensuring of even settlement of the area;
- support to small-scale economic activities, corresponding to the size of settlements;
- improvement of the access to available services, including field delivery – “itinerant services” (e.g. shop, library, post, etc.), utilising the available facilities, where possible;
- good condition of local roads to establish the accessibility and support to public passenger transport;
- rational use of municipal infrastructure;
- promotion of independence, strengthening of local communities and support to key services:

The increase in housing capacity in these settlements will be intended primarily for meeting the local needs, and also for secondary homes – holiday houses, but primarily in depopulation areas and in the areas with an explicit problem of population ageing.

General guidelines for the development of settlement network are given, while a detailed definition of development potentials, settlement functions and their interrelationship should be specified in municipal spatial planning documents, but in close cooperation between neighbouring municipalities, regions as well as in the cross-border area.

Recommendations for follow-up activities:

At the regional level, the criteria for directing and promoting the development of settlements and their role in the network of settlements should be elaborated in detail on the basis of general criteria. Considering a distinctive aspiration for concentration of population and activities on the narrow coastal strip in Slovenian Istra and the resulting unbalanced settlement network, a great deal of attention should be paid in the future to the redirection of such aspirations to other settlements in the region. Because of time and content restrictions, these activities have not been elaborated in this phase of the project, as they demand cooperation of all municipalities and harmonisation of their views of the settlement network development.

Description of spatial planning measures related to the network of settlements:

Measure	Objectives
Competitive polycentric urban network	<ul style="list-style-type: none"> ○ Establishment of a balanced network of settlements at the cross-border/regional level with a concentration of urban potentials ○ Strengthening the identity of cross-border urban area ○ High quality of dwelling in urban settlements and the definition of quality standards for construction and renewal of buildings (use of nature and people friendly materials, energy performance of buildings, use of rain water, utilisation of renewable energy sources), which will be more demanding than the minimum standards defined in the legislation³ ○ Availability of appropriate social services and infrastructure (education, schooling, health care, culture, administration, sport, recreation, utility services, supply services, transport, public transport, etc.) ○ Calming of land and real estate prices
Result indicators	<ul style="list-style-type: none"> ● Higher settlement density in urbanised areas (inhabitants/ha) ● Preservation of the percentage of urbanised areas ● Average plot price per m² ● Average real estate price per m²

³ Rules on thermal insulation and efficient energy use in buildings (OG RS, No. 42/2002, 29/2004), Rules on protection of buildings against humidity (OG RS, No. 29/2004), Rules on protection of buildings against noise (OG RS, No. 14/1999), etc.

Preservation of settlement and development of rural areas	<ul style="list-style-type: none"> ○ Provision of adequate building land for the development needs of settlements and local population ○ Appropriate accessibility and municipal infrastructure ○ Preservation and arrangement of new public areas in settlements (in particular recreation and green areas) ○ Provision of adequate social services and infrastructure in rural areas ○ Reasonable rounding of building land at the periphery of settlements at the border with rural land
Result indicators	<ul style="list-style-type: none"> ● Number of inhabitants in rural settlements ● Number of issued building permits in rural settlements ● Number of renewed buildings in rural settlements ● Ration between asphalt-paved and macadam local roads ● Number of regular bus connections between settlements ● Size of public areas in settlements ● Accessibility of public areas and services for all residents within a ten-minute walk ● Number of food and assorted goods shops
Strengthening the partnership between urban and rural areas	<ul style="list-style-type: none"> ○ Ensuring adequate social services and infrastructure in rural areas ○ Equalising the quality and accessibility of social services of urban and rural areas ○ Appropriate division of functions between urban and rural settlements in the region
Result indicators	<ul style="list-style-type: none"> ● Accessibility of public areas and services for all residents within a ten-minute walk
Renewal of urban centres/settlements	<ul style="list-style-type: none"> ○ Increased attractiveness of urban centres for dwelling ○ Increased compactness of urban centres and the achievement of increased urban density in the areas of too low density ○ Integrated spatial, economic and social renewal of town districts or parts of settlements ○ Gentrification of town centres ○ Arranged and accessible public areas ○ Higher quality of urban planning and architectural design of settlements ○ Improved quality of construction and renewal of buildings
Result indicators	<ul style="list-style-type: none"> ● Number of inhabitants in urban centres ● Increased settlement density in urban areas (inhabitants/ha) ● Accessibility of public areas and services for all residents within ten-minute walk on average ● Use of abandoned locations for building and arrangement of public areas (primarily green areas)

RDP 2007–2013 Projects	Description	Time frame	Institutions
Revitalisation of urban and rural settlements (Environment and Environmental Infrastructure, Efficient Spatial Planning ⁴)	<p>Integrated revitalization programmes for urban settlements as well as rural settlements and villages must be prepared for the region. In this framework, a priority list must be prepared and instruments proposed for the renewal and, thereafter, the development of these settlements.</p> <p>The priority revitalization areas are: old town centres of Koper, Izola and Piran.</p>	2008–2013	RDC Koper, Municipalities

⁴ The priority and measure of the Regional Development Programme (RDP) of South Primorska 2007-2013

Establishment of support economic infrastructure

The economy, as one of the foundations of the development of any region, will in the next years launch and also implement new development breakthrough in order to become globally competitive. The basic element of economic development are creative and educated people who continuously take care of their personal development. However, the only generator of employment is the value added, which has to increase and thus create new posts.

For the purposes of the development of economic activities, economic zones will be defined and adequately regulated. In addition to socio-economic conditions (capital, knowledge and workforce base), also the following spatial criteria will be taken into consideration in the development of economic zones: optimum connection with transport and energy networks, and other infrastructure; the vicinity and size of already existing economic zones and transport terminals; the size of settlements, their role in the urban system and access to the locations of planned economic zone locations; spatial opportunities and limitations arising from the state or characteristics of the natural and cultural landscape in which an economic zone is placed.

In accordance with the settlement planning criteria established in this field in the EU, as also the criteria set up by the Ministry of the Economy, the following types of economic zones will be distinguished:

Central economic zones of national scale (Type A)

The central economic zones of national (and eventually transnational) scale are the economic zones to which the widest territory gravitates. They are connected by the motorway network, regional R1 and Rⁿ and main M1 and M2 roads. As regards their content structure, they comprise a wide range of activities (industrial production, manufacturing crafts, warehouses, parking lots, distribution, business and service activities, etc.). The urban centre belonging to this type of economic zones is Koper.

Central economic zones of regional scope (Type B)

The economic zones of regional scope are in principle more numerous, of smaller scale and located in the vicinity of regional centres. The urban centres belonging to this type of economic zones are Sežana, Hrpelje-Kozina, Ilirska Bistrica.

Local economic zones (Type C)

The local economic zones provide location to small enterprises in municipal hinterland. The local economic zones are relatively the most numerous, and must provide adequate development area and cover systematically as large a territory as possible. Their characteristic is an oligoculture or monoculture content and smaller scale, and they are connected by local roads. The local centres belonging to this type of economic zones are Divača, Knežak, Podgrad, Starod, Jelšane, Izola, Piran, Komen.

A technology park will be established in Koper in which infrastructure will be established for technological enterprises (start-up and operative enterprises) and the development of support services. Two incubators will be set up in Koper and Sežana, and a university incubator will start to operate in Koper. According to the needs, technology parks and incubators may develop also in other locations.

The Port of Koper will progressively develop into the leading port in the North Adriatic, while ensuring high ecological standards through an efficient system of environmental management and established cooperation with local population.

The network of economic zones is shown in the cartographic appendix **Economy**.

Description of spatial planning measures in the field of support economic infrastructure:

Measure	Objectives
Ensuring the land for production and business activities	<ul style="list-style-type: none"> ○ Concentration of knowledge and economic activities in particular areas ○ Efficient distribution of functions in the region ○ Activation of degraded and poorly utilised areas in settlements ○ Appropriate location of residential and industrial areas ○ Reduce the negative impacts of production and business activities on the environment and human health (in compliance with environmental requirements in the legislation)

Result indicators	<ul style="list-style-type: none"> • Areas adequately provided with infrastructure for the development of economic zones • Distance to knowledge institutions and economic locations • Occupation of economic zones • Reduced size of degraded urban areas • Number of complaints on account of production and business activities (noise, smell, etc.)
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RDP 2007–2013 Projects	Description	Time frame	Institutions
Technological park (Economy, Integration for technological development)	Establishment of infrastructure for the development of technological enterprises (start-up and operative enterprises) and the development of support services. In addition to spatial capacities at subsidised price, a technological park offers also services for the development of new technologies, products and services and other entrepreneurial support services. It will be a technological park of 3,700 m ² net area available for letting to incubated enterprises, 400m ² to cover the needs of support activities of the park. Three technological centres for logistics, the sea and design will be set up within the technological park.	2007–2010	RRC Koper
Construction of business zones (Economy, Integration for technological development)	Construction and completion of infrastructure for entrepreneurial and business activities: crafts zones and business zones, industrial zones, incubator. Within this project, the following business zones will be constructed or completed: Sermin Industry and Development Zone, Hrpelje Crafts Zone, Sežana Jug Business Zone, Ilirska Bistrica Industry Zone, Podgrad Crafts and Industry Zone, Jelšane Crafts and Industry Zone, Starod Crafts and Industry Zone, Knežak Crafts and Industry Zone, Ilirska Bistrica Network Incubator, Risnik Business Zone.	2007–2013	Municipalities
Establishment of University Campus (Human resources, Knowledge for the economy)	The University Campus will integrate research and education in the field of natural sciences, biodiversity and state-of-the-art technology (development of environmental technologies). Two projects are in the course of preparation in Koper and Izola. The activities of the university campus may actually develop in all coastal centres, however, with suitable division and without irrational doubling of activities and services.	2007–2013	The State

Establishment of tourist infrastructure network and the support environment for tourist destinations management

In line with the Strategy for Sustainable Tourism Development of South Primorska, the development objectives, which are directly related to spatial objectives, are:

- to strengthen the sustainable character of tourism development as an element of integrated quality management;
- to reduce the environmental impacts of tourist activities;
- to establish suitable tourist offer in rural areas;
- to develop sustainable tourist and support infrastructure with a view to strengthen and harmonise tourism in urban and rural areas;

- adapt tourism management and marketing of natural and cultural sites to the needs of sustainable tourism development;
- to integrate urban tourism with rural tourism offer and establish cross-border destinations, tourist products and services;
- to integrate Slovenian Istra with the Kras-Brkini area;

Establishment of support infrastructure:

In order to improve tourist offer, it is of importance to develop small tourism suppliers, in particular various guest houses and boarding houses in rural areas and small settlements in inland parts of the region, to arrange cycle tracks and footpaths, representing the infrastructure for recreation and relaxation of visitors, and to invest into the construction of new and larger tourist centres in relation to artificial and natural attractions in touristically less or not developed areas. It is necessary to establish a network of services providing other possibilities of relaxation for visitors (pubs, farm tourism, selling of souvenirs, sports parks, guided tours, etc.), set up tourist and other information signs, invest in renewal and exploitation of degraded areas, the existing facilities and cultural heritage for tourism purposes.

Integration and development of tourist services and establishment of destination management organisation:

The activities within this set of measures will support the establishment of regional and cross-border destination management organisations, tourism education, introduction of systems and quality standards, integration of destination marketing activities, obtaining the resources for development projects and other joint activities in the interest of the tourist sector, development of services and improved offer in rural areas. In addition, the activities will integrate the management of natural values to create interesting tourist products and services, introduce the principles of sustainable tourism, prepare management plans for protected areas, including tourism as an economic activity in such areas, promote sustainable marketing of natural sites and features, such as for example interpretation, guiding, accessibility, involving of tourists in environmental activities, etc. The Natura 2000 areas should also be included in tourist offer of the region, however, with an appropriate management of tourist visits.

The future development of tourism and the associated support activities will be based on the development of the following sub-destinations:

- **Slovenian Istra with hinterland** comprising the tourist centres of Piran, Portorož, Lucija, Izola and Koper.

Development guidelines: Upgrading of intensive tourism development by raising the quality of the existing products and gradual realisation of sustainability principles. Specialisation in the offer of sub-destinations in the programme of coastal tourism and investment into the promotion of more competitive and strategic products: nautical products, conference/business tourism, and health and wellness tourism. Special emphasis will be placed on spreading tourist capacities and services to the coastal hinterland; however, not in the form of large tourist centres, but principally as dispersed tourist accommodation capacities in villages and other alternative forms of accommodation (e.g., small boarding houses, tourist farms, youth hostels, etc.). In this context, integration with the existing tourist and other public infrastructure should be taken into consideration, while complying with the environmental legislation requirements.

- **Kras** with the following areas:
 - Classical Kras with tourist centres of Štanjel, Lipica and Škocjanske jame,
 - Vipavska Brda and the Valley of Branica,
 - Brkini and Vremščica,
 - Slavnik, Čičarija and Matarsko podolje,
 - Kras Edge and the Valley of Glinščica.

Development guidelines: By reason of the need for a diversified offer, reducing the risk and dependence on seasons and due to the need for enhanced recognisability of the offer of the whole region of South Primorska and the Kras destination in particular, the following is proposed:

- strengthening the competitive advantages of the Kras sub-destination, in particular the speleology products (Škocjanske jame, karsology, speleology, cave wellness); and
- marketing segmentation of the offer through cultural tourism due to exceptional cultural monuments in the area (Lipica, Štanjel).

It is proposed to progressively introduce sustainable tourism development by adapting and increasing the quality of the existing products and creation of new ones in line with sustainable objectives. For this purpose, the following forms of sustainable tourism will develop at Kras:

- **products:** unique speleological, gastronomic, health, hunting, equestrian;
- **programmes:** cultural tourism in relation with the countryside, special forms of recreation, specialised conferences (attracting the conference participants from other Slovenian destinations to visit cultural sites and outstanding natural and other unique, competitive Kras products), natural science tourism (bird watching, photo safari, botanical excursions, etc.).

- **Brkini** with the centres of Prem, Mašun, Gomance, Sviščaki

Development guidelines: Enhance the competitive advantages of the sub-destination by eco-tourism, as a product diversification programme, by products related to the exploration of natural features of this area, such as mountaineering, hunting, fishing, photo safari, etc. Therefore, the tourist offer of Ilirska Bistrica will be directed to the creation of tourist products which include adventure, education and demonstration activities (e.g. storytelling, photo safari, multivision and multimedia presentations, guided visits, wilderness survival, etc.). Locating of large tourist complexes in this area is not acceptable, as it would be in contradiction with the above stated development guidelines.

Recreational infrastructure and thematic paths

Two very important **footpaths** cross the area of South Primorska. The first one is the European Footpath E6, connecting the Northern Adriatic with the Baltic Sea. In South Primorska, this footpath goes from Veliki Snežnik via Ilirska Bistrica, Slavnik and Pogorje to the Kras Edge where it descends at Podpeč, climbs to Kubed, visits the Istrian villages of Marezige, Pomjan and Šmarje, and reaches Strunjan via Gažon and Jagodje. The footpath is relatively well marked and shown on all good tourist and tracking maps. The other footpath represents the south-western part of the Slovenian Mountain Transversal from Maribor to Ankaran. It reaches the area in question over the peak of the Nanos Mountain and climbs to Slavnik via Vremščica and Brkini. From there it continues to Socerb and the villages of Osp, Tinjan, Škofije and Hrvatini to Ankaran.

In the areas of Kras and Slovenian Istra, the network of **cycling tracks** is quite dense and ramified; however, in most part it is not adequately arranged, although works have already started in some sections. In the area of Ilirska Bistrica, the network of cycling tracks has not been established yet, so that only the most important routes have been indicated, as designed within the framework of the national plan.

The network of **wine trails**, which covers all wine-growing areas in Slovenia, extends also to South Primorska where two separate networks have formed; i.e. in the Kras area and in Slovenian Istra. The purpose of wine trails is to present and acquaint foreign and domestic visitors with high-quality Slovenian wines and to attract them by gastronomic offer to visit more remote and less known places. Wine trails are usually accompanied by assorted offer of tourist and ecological farms and a ramified network of local tourist sites of special interest.

The conception of tourist destinations is shown in the cartographic appendix **Economy**; the network of thematic paths is shown in the cartographic appendix **Footpaths, cycling tracks and wine trails**.

Description of spatial planning measures in the field of tourist infrastructure:

Measure	Objectives
Establishment of areas and ensuring of land for tourist zones and the accompanying infrastructure	<ul style="list-style-type: none"> ○ Concentration of tourist activities in tourist zones ○ Efficient distribution of functions in the region ○ Reduction of negative environmental impacts of tourist activities ○ Appropriate location of tourist and residential programmes; ○ Improved accessibility of tourist centres by the development of sustainable mobility modes ○ Efficient investment in tourist accommodation and support infrastructure
Result indicators	<ul style="list-style-type: none"> • Number of tourist beds • Number of overnight stays by Municipalities • Occupation of accommodation facilities regardless the season • Environmental efficiency of tourist capacities (reduced consumption of water per tourist) • Connection of tourist facilities by public transport (e.g., number of hotels with a bus stop within 500 m) • Satisfaction of inhabitants with the effects of tourism • Satisfaction of tourists

RDP 2007–2013 Projects	Description	Time frame	Institutions
Development of tourist subregional destinations (Brkini, Kras, Istra with hinterland) (Economy, Development of tourist services)	The system of destinations management will be harmonized with the regional and national system, intended for the integration of local offer and the support to the development of new services, in particular tourist products that can be carried out by local people who manage and protect the natural areas and the products which ensure additional employment for local population.	2010–2013	Municipalities, tourism service providers, tourism investment companies, banks, ministries
Thematic paths (Economy, Development of tourist services)	Development, connection and maintenance of thematic paths, linked to the cultural and natural heritage, history and gastronomy. An important aspect is also management and promotion of thematic paths and cross-border connections with Italy and Croatia. Elaboration of a conceptual design of thematic paths across Brkini and the implementation of planned thematic paths in the areas of Kras and Slovenian Istra.	2009–2013	RDC Koper
Parenzana and suburban cycling network (Economy, Development of tourist services)	Completion of the full length of the Parenzana Route of health and Friendship, from the border with Italy to the border with Croatia by upgrading and additional offer; arrangement of rest areas, information boards, transforming the old railway station at Škofije into a mini museum, infocentre and a “car and bike” point. Arrangement and construction of suburban cycling network: (e.g., in the Municipality of Koper: Pobegi–Prade–Koper, Vanganel–Koper, Ankaran–Koper, Markovec–Olmo, etc.) and the primary cycling connection of the Coast with Slovenia: Parenzana–Bivje–Rižana and further inland)	2009–2013	Municipalities
Arrangement of the promenade along the entire coast (Economy, Development of tourist services)	The objective of this project is an overall arrangement of a promenade along the whole length of the Slovenian coast and the integration of varied content along the promenade (nature and biodiversity, cultural heritage, bathing infrastructure, moorings,) in order to establish the basis infrastructure for the improvement of the competitiveness of this tourist destination and the quality of life in the area.	2009–2013	Municipalities
Slovenian Adriatic Island (National Development Projects 2007-2023)	The project objective is to construct an island off the coast of Izola with a combined purpose to solve the problem of gravel deposit and to establish a great tourist attraction, providing the possibilities of relaxation, entertainment and socialising. Warning: In project conception it is necessary to ensure public accessibility of the area and give priority to the provision of social services	2009–2020	

	and infrastructure (e.g., sport and recreation areas). During the planning phase of such a complex development, it is essential to carry out the necessary preliminary expert groundwork (construction technical, environmental, programming and economic analyses) and prepare on this basis the requisite project documentation. The idea on the construction of an artificial island is included in the currently valid spatial planning documents of the Municipality of Izola. ⁵		
Integration of natural and cultural potentials of Kras (National Development Projects 2007–2023)	The project scope is to: <ul style="list-style-type: none"> - establish a European Kras Park - renewal of cultural heritage in the protected area of the Lipica Stud Farm and investment into the quality of tourist infrastructure - investment in the development of tourist infrastructure and offer, as well as education and the preservation of natural and cultural heritage in the wider area of Škocjanske jame - investment into the renewal of Štanjel - establishment of the institution and infrastructure for a regional Kras park. 	2011–2016	

5.2 TRANSPORT

The conception of transport management will contribute to the attainment of the following spatial development objectives:

- **Improved internal and external integration of the region**
- **Strengthening of sustainable communities (urban centres)**

The conception of transport infrastructure management

Development of transport infrastructure

The development of transport infrastructure is one of the key elements supporting the competitiveness of the region. Appropriate development of transport infrastructure enables the attainment of the following key objectives:

- increased competitiveness of the region,
- strengthened development of strategically significant urban centres and their economic potentials,
- enhanced development of less developed parts of the region and the rural areas.

⁵ Amendments to the spatial plan of the Municipality of Izola (2004) for the coastal area between Koper and Izola and hospital contact area: Construction of a jetty is foreseen at the Cape of Viližan. Prior to detailed analysis, it is considered that the facility should be at least 80 metres away from the coast. It should avoid the protected area of archaeological heritage and allow a view of the town of Izola from the coastal promenade.

The structure (artificial island) should be built in pure stone material. To the north, the structure should be protected by a jetty. Prior to a precise definition of its size, it is necessary to carry out a study of physical characteristics of the sea environment by a pilot model test. The coastal strip – infralittoral represents an extremely vulnerable biotope and, therefore, the structure should not interfere with it. Also, the sea currents near the coast should remain unchanged to the maximum extent possible. Before the construction, it is essential to carry out the necessary archaeological research. Additional expert groundwork should be prepared prior to the elaboration of a detailed plan, namely: a survey of the narrow coastal strip, a laboratory hydrological test of a model jetty, a study of the sea currents along the coast and all other studies and research deemed necessary for the definition of the shape, size and the position of the structure in the sea. Prior to the construction of artificial island, all sewage discharges into the bay should be remediated.

The development of transport infrastructure will contribute essentially to the attainment of the objective – Improvement of the quality of life in the region through sustainable development. A well considered development of transport infrastructure will contribute significantly to the reduction of dependence on personal cars and thus contribute to slower increasing of the emission of greenhouse gasses, the reduction of regional contribution to the climate change, the reduction of noise in urban environments and to the reduction of air pollution. In addition, it will contribute to the reduction of traffic congestion and the related costs and to the increased accessibility of transport services also for those inhabitants who cannot, for various reasons, use a personal car.

The measures related merely to the development of transport infrastructure do not suffice if we wish to reduce the emission of CO₂ and to mitigate the traffic jams and reduce other negative traffic effects. Therefore, measures should be introduced to improve transport management and support relevant economic instruments.

Transport and strategically significant urban centres

The future economic success of the region depends also on an efficient organization and functioning of strategically significant urban centres with soundly operating system of sustainable mobility. Without radical changes in the field of mobility, these centres will become less attractive for dwelling, burdened by noise and polluted air, poor traffic safety, traffic jams and unreliable travel times (due to congestion), which all will further reduce the development potential of the region.

Therefore, strategically significant urban centres (especially the Koper–Izola–Piran conurbation) need comprehensive transport strategies, taking into account a wider area supplied by these centres (at the cross-border and regional levels, regardless the municipal (and national) borders). Such strategies will define strategic investments, the measures regarding the management of traffic flows, including the measures supporting the renewals of particular town districts. Investments will be needed in new technologies and the measures for changing the transport habits of the population. The measures will be directed also to the provision of better accessibility of services at reduced mobility, the measures promoting the access on foot and by bicycles as an important mode of urban mobility and the measures increasing the competitiveness of public transport.

The institutions responsible for the introduction of measures will be municipal administrations, cooperating between themselves, public transport operators and other stakeholders. Cross-border cooperation will be established, in particular with Trieste, in order to achieve a coordinated approach to solving this problem.

The activities leading to the modal breakdown to the benefit of sustainable mobility modes:

- establishment of attractive, safe and handy footpaths and cycle routes, connecting the residential areas, employment centres, town centres, schools and educational institutions, and other key destinations, by taking into consideration the examples of good practice;
- establishment of main public transport corridors, including the lanes reserved for public transport in the areas of frequent traffic jams;
- strengthening the role of motor and rail public transport;
- calming down the traffic in town centres and through settlements (parking areas at the periphery of towns, P-R system, "destimulation" of long parking, rerouting of commuters to public transport, closing the town centres to motor road traffic, slowing down the traffic, improved traffic safety, etc.).

Priority areas of public transport promotion:

- **motor**: the surroundings of coastal urban agglomerations, the surroundings of Ilirska Bistrica, the surroundings of Sežana and the connection with Trieste;
- **rail**: in the direction towards central Slovenia, preparation of requisite studies for the decision on connections with Trieste and Croatian Istra;
- **maritime**: connections between Slovenian, Croatian and Italian coastal towns.

Investment will be needed into:

- adequate sustainable mobility infrastructure;
- selective investments into urban road network;
- change points with the accompanying infrastructure (parking lots, bicycles).

The municipal administrations, in cooperation with other stakeholders, will take measures also in the field of transport demand management, namely:

- establishment of integrated and uniform parking fees in urban centres;
- systematic information of users;
- planning of the accessibility of recreational areas, bathing areas and other critical areas during peak hours;
- establishment of information systems (rerouting to less loaded traffic routes, to vacant parking lots, public transport information system).

The more demanding transport management measures will be introduced gradually in order of priority, but in a coordinated way, on the level of individual urban centres and the Koper–Izola–Piran conurbation and, if possible, in cooperation with Trieste. Later on it will depend on the needs in other strategically significant urban centres. The measures supporting sustainable mobility modes (in particular the establishment of attractive, safe and handy footpaths and cycle routes) will be implemented in all strategically significant urban centres and other more important urban centres, as well as in small local centres.

Strategic regional transport links

The transport links crucial to the regional economy are those leading to the capital of Ljubljana, towards Italy and Croatia, including the railway, the Port of Koper and the airports (Ljubljana–Brnik, Trieste–Ronchi, Pula, Krk and Portorož).

The following is of key importance in order to enhance the competitiveness of the region and to realise its development potential:

- completion of the missing sections of the motorway network in the region;
- construction of the second railway line Koper–Divača and the modernization of railway network;
- construction of a railway link between Koper and Trieste;
- recategorization and improvement of particular roads for better supply of remote areas;
- construction of the third pier in the Port of Koper and the establishment of maritime passenger terminal in Koper and passenger piers in Portorož, Izola and Piran;
- modernization of the Portorož Airport and better connection of the region with the Brnik, Ronchi, Pula and Krk airports.

Connection of transport systems

Transport systems, especially road, railway and maritime systems, both passenger and freight, will be connected at contact points, which will enable the changing (freight and passengers) between different transport modes. Multimodal logistics centres will be established in Koper (connection of maritime, rail and road transport) and in Sežana and Ilirska Bistrica (connection of rail and road transport). In urban centres, suitably arranged footpaths and cycle tracks are of special importance for the provision of appropriate access to social services and the connection between the said transport systems.

Road transport infrastructure

The present motorway network will be complemented by the connection between Postojna/Divača–Ilirska Bistrica–Jelšane and Koper–Dragonja, and a connection to the Port of Koper. The high-speed road sections Koper–Izola and Jagodje–Lucija will be constructed. After the construction of the high-speed road, motor traffic will be abandoned on the coastal road between Koper and Izola. The national roads Pivka–Podgrad and Kozina–Starod will be modernized; the local roads Ilirska Bistrica–Sviščaki and Harije–Tatre–Divača will be recategorized into a national road and modernized. In addition, the transversal road connection Idrija–Ajdovščina–Štanjel–Komen–Nabrežina–Sesljan will be constructed and modernized, as it represents an important transversal axis linking the entire cross-border and coastal Lower Kras with the hinterland. The maintenance of the roads of lower regional and local orders will be the responsibility of municipalities.

Railway transport infrastructure

The volume of road transport can be reduced by its rerouting to railways. In particular the freight transport should be rerouted to the railway to the largest extent possible. This will reduce the need for storage capacities in the Port of Koper and at the same time increase the maritime freight transport. These are considered the national projects of modernization of the existing railway line and the construction of the second railway line Koper–Divača and the modernization of the railway line Pivka–Ilirska Bistrica. It is necessary to examine the feasibility of the construction of a direct railway connection between Koper and Trieste.

Maritime transport

The Port of Koper will progressively develop into the leading port in the North Adriatic, while ensuring high ecological standards through an efficient system of environmental management and established cooperation with local population. Development of infrastructure and loading capacities is of crucial importance for further development and strengthening the competitive position of the Port of Koper in the network of Northern Adriatic ports. In addition, infrastructure will be arranged for new passenger and ferryboat lines. New passenger and ferryboat lines will be introduced and the flow of passengers will increase. A modern passenger port will be constructed in Koper, which will at the same time represent a measure for the renewal of presently degraded urban area. The maritime transport will be carried out also between the coastal centres where smaller passenger piers will be arranged on existing locations.

Air transport will be based on the development of the international Portorož Airport, which will become an important terminal for medium and business airplanes. The nearby airports of Brnik, Ronchi, Pula and Krk are also important with regard to the accessibility of the region. Tourist air traffic will develop on the existing sport airport at Dolenje Ležeče near Divača.

In developing the Portorož Airport and the consequently increased traffic, due regard should be paid to increased noise and pollution in relation to the vicinity of the Sečovlje Saltpan Landscape Park and the settlement area of Portorož. In the development of the airport at Dolenje Ležeče near Divača, the close proximity of the Škocjanske jame Regional Park should be taken into account.

The conception of transport infrastructure management is shown in the cartographic appendices **Transport**, **Transport – road network** and **Sustainable mobility**.

Recommendation for follow-up activities:

In the project follow-up, special attention should be given to systematic collection and treatment of information on transport and the consideration of the **three types of transport**: transit, tourist and local. This will serve as a basis for the formation of appropriate integrated transport plans, with a view to promote sustainable mobility modes and coordinated planning of transport and settlement network. In addition, it is necessary to carry out studies for **the development of regional and local connections** (improved internal accessibility and connectivity of settlements, support to the development of public transport, elimination of imbalances due to the construction of national and international traffic routes, elimination of traffic congestions resulting from tourist traffic, etc.)

Description of spatial planning measures in the field of transport infrastructure management:

Measure	Objectives
Establishment of sustainable mobility	<ul style="list-style-type: none"> ○ Reduced negative environmental impacts of transport ○ Reduced pressures on quality ambient (coastal strip, historic urban centres) ○ Improved access to transport services for a large circle of users ○ Increased traffic safety ○ Lower cost of mobility
Result indicators	<ul style="list-style-type: none"> ● Average daily traffic in individual sections (reduction of personal and especially freight transport) ● Number of personal cars per 1,000 inhabitants ● Number of passengers in public transport ● Number of the users of cycling tracks
Integrated planning of transport infrastructure	<ul style="list-style-type: none"> ○ Harmonised planning of activities and development of settlement networks in relation to the development of transport network ○ Reduction or prevention of the need for motorized mobility through efficient location of activities
Road transport infrastructure	<ul style="list-style-type: none"> ○ Increase the transport accessibility and transitivity of the region ○ Reroute the road traffic flows from the precious coastal strip ○ Improve the condition of the roads of regional and local order ○ Ensure adequate connection of regional and local road network to the national network

Result indicators	<ul style="list-style-type: none"> • Share of transport costs in total business costs of companies • Average daily traffic in individual sections (reduction of personal and especially freight transport) • Volume of goods and persons carried by railways • Number of passengers in public bus transport
Rail transport infrastructure	<ul style="list-style-type: none"> ○ Increase the transport accessibility and transitivity of the region ○ Reroute the freight transport to the railways ○ Construct new rail connections and modernize the existing ones
Result indicators	<ul style="list-style-type: none"> • Volume of goods and persons carried by railways • Length of constructed rail lines (in km) • Length of modernized rail connections (in km)
Maritime transport infrastructure	<ul style="list-style-type: none"> ○ Increase the transport accessibility and transitivity of the region ○ Growth of the Port of Koper as a freight and passenger port ○ Establish the system of public maritime transport
Result indicators	<ul style="list-style-type: none"> • Number of passengers in ports per year • Number of newly established ship and ferryboat lines • Volume of goods carried in ports
Air transport infrastructure	<ul style="list-style-type: none"> ○ Development of the Portorož Airport into an important passenger terminal for medium and business airplanes ○ Modernization of airport infrastructure
Result indicators	<ul style="list-style-type: none"> • Number of passengers carried through the Portorož Airport per year

RDP 2007–2013 Projects	Description	Time frame	Institutions
Establishment of sustainable mobility system in the region (Environment and environmental infrastructure, Sustainable mobility in the region)	The objectives of sustainable transport must be defined in the region and the analysis of the accessibility of social services carried out. On this basis, it is necessary to prepare a plan for sustainable transport and harmonise it with municipal spatial plans and guidelines. A uniform public transport timetable and payment system must be introduced. In order to carry out the overall system, a logistical centre for passenger transport management must be established with a parallel construction of the requisite infrastructure.	2007–2009	Municipalities, Ministry of Transport (MT)
Construction and modernization of the road network (Economy, external regional integration)	Construction of motorway and high-speed roads (connection Port of Koper, Koper–Izola, Jagodje–Lucija, Postojna/Divača–Ilirska Bistrica–Jelšane). Modernization of the national road Pivka–Podgrad in Kozina–Starod; Ilirska Bistrica–Sviščaki, recategorization and modernization of the local road Harije–Tatre–Divača into a national road	2007–2013	Municipalities, MT, Directorate of the Republic of Slovenia for Roads (DRSR)
ADRIALPIKA (Economy, External regional integration)	Construction or modernization of the transversal road connection Idrija–Ajdovščina–Štanjel–Komen–Nabrežina–Sesljan	2011–2017	
Second railway line Divača–Koper (Economy, External regional integration)	The density of road transport can be reduced by its rerouting to the railways. In particular, freight transport should be rerouted to the largest extent possible.	2010–2013	Slovenian Railways, Port of Koper, Municipality of Koper
Modernization of railway network (National)	This will result in reduced need for storage capacities in the Port of Koper and also the increase in maritime freight transport.	2008–2020	

Development Projects 2007–2023)	Spatial and technical documentation will have to be prepared for the investments and carry them out. This includes the projects of the modernization of the railway line and the construction of the second line Koper–Divača, the modernization of the railway line Pivka–Ilirska Bistrica, completion of the port infrastructure (pier II, pier III), and the establishment of multimodal terminals.		
Development of the Port of Koper (Economy, External regional integration)	Within this project, spatial and technical documentation will have to be prepared and the following project realized: completion of the port infrastructure (Pier II, Pier III), the construction of passenger port in Koper.		Port of Koper, MT, Municipality of Koper
Maritime passenger terminal Koper (Economy, External regional integration)			
Multimodal logistics centre (Economy, External regional integration)			

5.3 MUNICIPAL INFRASTRUCTURE

The conception of municipal infrastructure management will contribute to the attainment of the following spatial development objectives:

- Strengthening of sustainable communities (urban centres);
- Sustainable management of natural resources.

The conception of municipal infrastructure management

Development of municipal infrastructure

Water supply comprises the provision of (extraction, preparation, distribution) drinking water, process water and fire-extinguishing water and simultaneous protection and preservation of natural resources.

Water supply will be provided from three existing public supply systems:

- the Rižana water supply system utilizing the spring of the Rižana River, Gradole and Brestovica;
- the Kras water supply system utilizing the Klariči (Brestovica) reservoir and Nanos water sources;
- the water supply system of Ilirska Bistrica utilizing the spring of Bistrica River.

In order to meet the needs for water in the region, it is proposed to construct two retention reservoirs at the Padež and Suhorka watercourses having an adequate catchment area, while the construction is possible in more phases and the safety of the water resource is higher. The new water resource will provide a long-term supply of drinking water for the population presently supplied by the Rižana water supply system, and at the same time this source will represent a reserve source of water for the Kras and Ilirska Bistrica water supply systems. Water protection areas have been established for the envisaged water source, which are together with the water protection areas of other water supply systems, shown in the cartographic appendix **Flood, erosion and water protection areas**. It is also planned to construct a regional water supply system, connected to the existing regional water supply system at Kozina. A connection should be established within the regional water supply system, namely between the Kras and Ilirska Bistrica water supply systems and between the Ilirska Bistrica system and the planned Padež–Suhorka water source.

In order to achieve sustainable utilisation of water resources, it is necessary to introduce measures for the reduction of drinking water consumption, for example by reducing water loss from water supply systems, promotion of rational use of water in households and industry, reuse of adequately treated waste water in activities, where possible (process water, watering, irrigation), utilisation of rain water (sanitary water, irrigation).

Recommendations for follow-up activities:

In the field of drinking water supply, the regional strategy covers the major water sources providing for the regional water supply system. At the local level, local water sources are vital for drinking water supply and irrigation of agricultural land. In the project follow-up, the strategy for use and protection of water sources should be defined.

Urban waste water management

In accordance with the Operational Programmes for the Discharge and Treatment of Urban Waste Water, all settlement areas with more than 10,000 PE will be provided with a public sewage system and a waste water treatment plant by 31 December 2008, and by that time at least 95% of the load generated due to waste water will be connected to the public sewage system. Such areas in the region are Koper, Izola and Piran.

The settlement areas with the load of 2,000 PE to 10,000 PE will be provided with a public sewage system and a waste water treatment plant by 31 December 2015, and by that time at least 95% of the load generated due to waste water will be connected to the public sewage system. Such areas in the region are Ilirska Bistrica and Sežana.

All other settlements in the region will be provided with a public sewage system and a waste water treatment plant by 31 December 2015, and by 31 December 2017, a substantial part of the load will be connected to the public sewage system.

Table 1: The following programmes for the discharge and treatment of urban waste water are planned in the region of South Primorska

Municipality	Settlement	Programme	Construction time limit ⁶
Izola	Izola – city	Discharge of waste water at WWTP Koper (reconstruction required), completion of sewage network	2008
	Jagodje	Discharge of waste water at WWTP Koper (reconstruction required), construction of the missing parts of the sewage network	2015/2017
	Dobrava	Discharge of waste water at WWTP Koper (reconstruction required), construction of the missing parts of the sewage network	2015/2017
	Izola Hospital	Discharge of waste water at WWTP Koper (reconstruction required)	2008
	Šared	Discharge of waste water at WWTP Koper (reconstruction required), construction of the missing parts of the sewage network	2015/2017
	Cetore	Sewage network and TP Cetore constructed	
	Maliija	Discharge of waste water at WWTP Piran (reconstruction required), construction of the missing parts of the sewage network	2015/2017
	Korte	Sewage network and TP Korte partly constructed, planned capacity of 1,000 PE	2015/2017

⁶ The time limit for the construction of sewage network and treatment plants is taken from the national and municipal Operational Programmes for the Discharge and Treatment of Urban Waste Water.

Municipality	Settlement	Programme	Construction time limit⁶
	Korte–Medoš, Draga	Planned construction of sewage network and TP Medoš–Draga	2015/2017
Koper	Koper, Pobegi, Prade, Sv. Anton, Bošamarin, Kappel, Manžan, Šalara and Vanganel	Constructed sewage network and treatment at WWTP Koper (50,000 PE)	2008
	Ankaran, Kubed, Osp, Zgani, Škofije, Movraž, Lukini, Dvori	TP Ankaran, TP Kubed, TP Osp, TP Žgani, TP Škofije, TP Movraž, TP Lukini and TP Dvori	2015/2017
Piran	Piran	Constructed sewage network and TP Piran (30,000 PE), reconstruction planned (33,000 PE)	2008
	Sveti Peter, Sečovlje, Dragonja, Nova vas, Padna, Orešje	Partly constructed sewage network and operative TP Sveti Peter, TP Sečovlje (upgrading planned), TP Dragonja, TP Nova vas, TP Padna, TP Orešje	2015/2017
	Špehi, Goreli	Planned construction of sewage and TP Špehi–Goreli	2015/2017
	Kortina	Construction of sewage network and TP Kortina planned	2015/2017
Ilirska Bistrica	Ilirska Bistrica	Partly constructed sewage network and constructed TP Ilirska Bistrica	2015/2017
	Šembije	Partly constructed sewage network and constructed TP Šembije	2015/2017
	Vrbovo (incl. Vrbica), Koseze, Topolc, Dolnji Zemon, Zarečje, Velika Bukovica, Jablanica, Zarečica, Gornji Zemon, Rečica, Dobro Polje	Partly constructed sewage network and connection of settlements to TP Ilirska Bistrica	2015/2017
	Other agglomerations above 50 PE as to the compulsory programme	Planned construction of sewage network and connection of settlements to local TP	2015/2017
Hrpelje-Kozina	Hrpelje-Kozina	Partly constructed sewage network and constructed TO Hrpelje-Kozina (1,000 PE)	2015/2017
	Other agglomerations above 50 PE as to the compulsory programme	Planned construction of sewage network and connection of settlements to local TP	2015/2017
Komen	Komen	Partly constructed sewage network and TP	2015/2017
	Štanjel and Kobdilj	Construction of sewage network and TP	2015/2017
	Other agglomerations above 50 PE	Construction of sewage network and local TP which locations have not been defined yet	2015/2017
Divača	Divača	Partly constructed sewage network and constructed TP Divača (1,500 PE)	2015/2017
	Senožeče	Partly constructed sewage network and constructed TP Senožeče (1,200 PE)	2015/2017
	Other agglomerations above 50 PE as to compulsory programme	Planned construction of sewage network and connection of settlements to local TP which locations have not been defined yet	2015/2017
Sežana	Sežana	Partly constructed sewage network and constructed TP Sežana	2015/2017
	Other agglomerations above 50 PE as to the compulsory programme	Planned construction of sewage network and connection of settlements to local TP	2015/2017

In parts of the region with low population density, the cost of infrastructure is high due to the location of agglomeration in vulnerable areas, thus demanding high investments by municipalities with relatively low financial capabilities. **The municipalities therefore need a direct and permanent source of funds provided through water and environment pollution taxes.**

A comparative study of investment costs for equipping the agglomerations on karstic terrain shows that discharge and treatment of waste water in such places is very expensive. This may be explained by highly expensive excavations in rock (limestone) and unfavourable terrain configuration (no constant inclination), which dictates a larger number of pumping stations and smaller treatment plants. **The municipalities on such terrains should be provided with permanent systemic income (taxes and other), as only in this way they may be able to pursue the goals determined by the national operational programme for the discharge and treatment of urban waste water and rain water.**

The identified investment into the infrastructure for discharge and treatment of urban waste water is only an element of efficient management as the entire system depends on efficient investment implementation (e.g., appropriate concept of discharge from sewage system, minimum water losses in plumbing and minimum infiltration into the sewage system).

The CAMP project Regional Programme of Environmental and Water Sources Protection, dedicated in particular to the treatment of urban waste water, is an important basis for the development of the concept of coastal strip and sea use management. Concerning the envisaged development, the presented Conception provides the possibility, especially with regard to the extension of the existent settlement areas (enlargement of agglomeration), to assess the condition of infrastructure for the discharge and treatment of waste water already in the phase of the formulation of spatial planning strategy. The regulation of the infrastructure in question is a basic precondition for intended investments. Equipping of the region with the necessary infrastructure (sewage system and waste water treatment plant) is highly cost demanding and, from the economic point of view, also ineffective due to the small economy of scale. In coastal area development, it is therefore necessary to give priority to the agglomerations supplied with suitable infrastructure. Therefore, the guidance is that infrastructurally equipped areas should be given priority in the event of settlement extension.

In the development of large complexes in areas without infrastructure, the investment should provide not only for the discharge and treatment of waste water from the planned facility but also for the discharge and treatment of waste water at the common treatment plant in the development area.

Considering the significance of water pollution from rain water and combined sewage systems, it is necessary to pay special attention to the rain water retention facilities in combined and rain water sewage system, because discharge from these systems represents a high pressure on water sources in the region. This is particularly important for sewage systems where excessive rain water and combined waste water is discharged directly into the sea, thus presenting a threat not only to the natural resources (increased eutrophication) but also to bathers. Therefore, an essential spatial planning component, which should be incorporated into the development plans for the coastal strip, is reserving the space for the construction of retention systems and a more appropriate discharge of water from sewage systems. The retention systems can be built underground, and so the space is not necessarily reserved on the surface; nevertheless, the facilities should be properly planned and located.

Recommendations for follow-up activities:

The operational programme addressing the agglomerations that, according to the EU legislation, belong to the priority group (agglomerations with more than 2,000 PE) has been appropriately carried out and it is expected that the goals will be achieved in compliance with the guidelines of the national operational programme. **However, the objectives can only be achieved with substantial State support. The above standard for agglomerations with 50 PE was adopted at the national level; therefore, the Republic of Slovenia cannot turn over the obligation and burden to the municipalities but must ensure adequate resources for the execution of the operational programme.**

Waste management

One of the major problems in the municipalities are filled-up landfill sites. The Municipality of Izola has a regulated landfill and at the present rate of waste disposal there is enough space available for the next five years. The situation is similar with the landfill in Piran, but the landfill site is filling up fast. The Municipality of Koper managed to extend the landfill site and thus secured the space until 2008, but now they are looking actively for a new solution. The four Kras and Brkini municipalities have a common landfill site in the area of WMC Sežana. By an adjustment programme, they regulated the system of leachate drainage and degasification. The WMC Sežana has a waste disposal capacity available for another few years. In the Municipality of Ilirska Bistrica, waste disposal is ensured only until the end of 2007. All landfills have a waste disposal permit until October 2007.

All municipalities in the region joined the GOJUP Consortium that set itself as the first task to introduce separate collection of waste at source and the arrangement of collection points (eco islands) and collection centres on the level of individual municipalities. At the regional level, the municipalities members of the GOJUP Consortium defined a scenario that envisages two regional waste management centres (WMC):

- **Regional WMC Koper** in the area of Sermin where treatment of separately collected fractions will be carried out in the following facilities: sorting, composting, dismantling of bulk waste and household appliances, collection centre and loading station. Mechanical and biological treatment of residual waste will also be possible.
- **Regional WMC** where mechanical biological treatment of residual waste and the preparation for further material utilization of waste will be carried in order to achieve maximum material utilization. A smaller part of stabilized residual waste will then be safely deposited.

The location for the second regional centre is still being looked for. The searching procedure is based on the study of natural features of areas in all municipalities, suitable for the construction of such a centre, which was elaborated by the Geological Survey of Slovenia and also on the assessment of social acceptability of the proposed areas. The result of the study are 21 areas suitable for the location. At present, public presentations of potential locations are taking place at the local level.

Recommendations for follow-up activities:

An agreement should be reached as soon as possible on a suitable location for the construction of regional WMC. The location, however, should be chosen through active participation of residents in all planning and construction procedures. Alternative solutions for waste management should be developed and a comparative analysis carried out at the regional level. In this respect, the cooperation between municipalities is of utmost importance.

Energy infrastructure

Electric energy infrastructure

It is proposed to construct the following overhead power lines:

- 2x400 kV Lavrica–Divača
- 2x400 kV Divača–Italy
- 2x110 kV Divača–Postojna
- 2x110 kV Dekani–Sermin

The **gas transmission network** for natural gas runs along the northern margin of the region as a gas pipeline M3 Ljubljana–Šempeter. To ensure the consumption of natural gas in the coastal area and in the Municipalities of Sežana and Hrpelje-Kozina, a pipeline M6 Ajdovščina–Lucija will be constructed, ensuring also the connection with Croatia, with the pipeline Gažon–Dragonja. For the area of Ilirska Bistrica and the connection of Postojna and Pivka to the gas transmission network, a connection Kalce (Logatec)–Jelšane is planned, with a connection to Croatia. A transversal connection Hungary (Croatia)–Italy is envisaged through the Kras area as a trans-European magistral gas pipeline (international gas pipeline M9 Dolga vas (Hungarian border)–Opatje selo (Italian border)). As the gas pipelines will run through a very vulnerable karstic area, they will be thoroughly examined and harmonized with spatial limitations.

Renewable energy sources

A special emphasis will be laid on the development of local energy and the utilization of renewable energy sources. Because of the geographical situation, the **solar energy** should be especially underlined in the coastal part of the region. The solar energy is utilized by individual households mainly for water heating, but it is actually not used for the electric energy supply.

In the area of South Primorska, conflicts are arising between the initiatives and projects for the utilization of **wind energy** and the protection of natural values. This is especially evident in the first attempt to locate a wind power plant at the northern margin of the Municipality of Ilirska Bistrica. The environmental vulnerability study of the utilization of wind energy has defined a very large potential area, but which does not include the nature protection areas (ecologically significant Natura 2000 areas) and the actual wind potential of individual areas. In the Conception, the utilization of wind energy is considered as a potential renewable energy source, while exact areas or even individual locations have not yet been defined.

Ilirska Bistrica, with the presently installed power of 2 MW and a capacity potential of 8 MW of municipal **wood biomass** heating network, has become the national reference line for the utilization of wood biomass. Wood biomass is of economic importance especially due to the large forests and overgrowing land in the region.

Information and communication network

Local and subregional optic cable connections will be set up to create a backbone for the establishment of information and communication network, thus enabling new technologies which will affect the work methods and spatial distribution of activities. To provide a modern communication system, all larger centres (municipal centres) will be connected by efficient transmission (optic cables).

The municipalities and the region will promote development and introduction of modern telecommunication infrastructure also at the level of local centres. Here this implies the use of the present fixed telephone network, cable TV network and mobile network. At the maximum utilization of infrastructure and the establishment of e-government and e-business, telecommunication will represent a motive power for the redistribution of activities in the physical space.

The conception of municipal infrastructure is shown in the cartographic appendices **Water supply, Municipal infrastructure, Energy infrastructure.**

Description of spatial planning measures in the field of municipal infrastructure management:

Measure	Objectives
Completion of the basic environmental infrastructure	<ul style="list-style-type: none"> ○ Ensure high-quality public utility services for the population and the economy ○ Ensure efficient waste water treatment – upgrading of sewage network and TP ○ Ensure safe drinking water supply and reduce water losses in plumbing – modernization of water supply networks, construction of Suhorka–Padež retention basin ○ Arrange the regional waste management centre of order I ○ Reduce the environmental pressures
Result indicators	<ul style="list-style-type: none"> ● % of households connected to sewage network and TP ● Quality of sea water (trophic index) ● Concentration of nitrates and phosphates in coastal waters ● % of households connected to public water supply networks ● % of suitable drinking water samples in the most important water supply networks ● Water consumption in m³/inhabitant/year ● % of households and companies participating in the waste management system ● Volume of urban waste per inhabitant ● % of separately collected waste fractions ● % of recycled waste

Sustainable energy supply	<ul style="list-style-type: none"> ○ Harmonised planning of settlement areas, economic zones and infrastructure for energy supply (municipal heating, steam supply, gas pipeline) ○ Clear definition of the conditions for location of renewable energy sources projects (solar, wind, biomass)
Result indicators	<ul style="list-style-type: none"> • Elaborated regional energy conception • % of inhabitants connected to the municipal heating systems • % of electrical energy from renewable energy sources in the structure of consumed electrical energy
Development of information communication technologies	<ul style="list-style-type: none"> ○ Reduce the economy communication costs ○ Wide accessibility to ICT with an emphasis on the provision of adequate infrastructure to smaller settlements
Result indicators	<ul style="list-style-type: none"> • Number of ICT technology users (economy, households) • Number of social services through Internet and the number of their users • % of inhabitants with Internet access

RDP 2007–2013 Projects	Description	Time frame	Institutions
Modernization of water supply systems in order to reduce the loss of water and substitute the water supply network made of asbestos pipes and drinking water supply (The environment and environmental infrastructure, Efficient public utility services)	<p>The water supply system will be arranged in terms of regional integration and the strengthening of water source. In addition, minor water supply systems will be provided for the subregions of Brkini, Kras and others.</p> <p>Preparation of project and technical documentation for the Suhorka–Padež retention basin. Preparation of the national spatial plan, which is in the process of being granted the environmental permit.</p>	2010–2013	State, Municipalities, public utility companies
GOJUP – waste management in South Primorska (The environment and environmental infrastructure, Efficient public utility services)	Construction of a uniform system of separated waste collection in municipalities with collection points, construction of two regional waste management centres with a sorting line for separately collected waste, a composting unit for treatment of organic waste, a unit for treatment and preparation of residual waste for further material utilisation and a regulated deposit area for treated inert residual waste.	2008–2013	Municipalities, public utility companies
The system of discharge and treatment of urban waste water (The environment and environmental infrastructure, Efficient public utility services)	In the field of discharge and treatment of urban waste water, municipal operational programmes will be carried out, protection of all catchment areas and the sea against pollution, the measures for the reduction of pollution and the volume of waste water (population, industry, agriculture, ballast water).	2007–2017	Municipalities, public utility companies
Development of the ICT regional backbone (Economy, External regional integration)	Regional broadband telecommunication connections will be set up, and the use of this infrastructure introduced through the promotion of its advantages. Affordable infrastructure will contribute to its promotion.	2010–2013	Municipalities, Ministry of the Economy, telecommunication companies

5.4 LANDSCAPE

The conception of activities and land use in the landscape will contribute to the attainment of the following spatial development objectives:

- **Strengthening of regional identity and attractiveness;**
- **Sustainable management of natural resources.**

The conception of activities and land use in the landscape

Agriculture, fisheries and forestry

In the light of spatial development, the classification of **agricultural land** into the best and other agricultural land is an important factor. Due to a very restrictive legal protection of the best land, which is determined exclusively on the basis of sectoral references, the agricultural sector have often hindered a logical and directed urban development in the last two decades. Especially in large settlements, these restrictions have prevented the changes in land use category, often irrespective of the actual use and quality of the land, and thus reducing the possibilities of further settlement also in small rural settlements. In addition, from the spatial planning point of view, defining the land in urban planning zones or at their margins as the best agricultural land is inappropriate, as in these areas intensive agricultural production is not compatible with the residential environment.

Modern, sustainable approaches to food production (integrated production, ecological production) are increasingly gaining ground in the region and exploiting the natural particularities (soil, climate, relief). Regarding the natural structure and climatic conditions, the conditions in different parts of the region are suitable for various farming modes. It would, therefore, be appropriate to further develop them in the future and thus establish a system of internal specialisation of the agricultural production in the region:

- wine growing (Kras, Slovenian Istra),
- fruit growing (Brkini, Slovenian Istra),
- livestock production (Kras – cattle, horse and sheep breeding; Slovenian Istra – sheep breeding, Brkini – cattle and sheep breeding),
- vegetable cultivation or horticulture (Slovenian Istra, Brkini),
- olive growing (Slovenian Istra).

Kras and Slovenian Istra need water for **irrigation** of agricultural land; however, a detailed analysis of the needs for and the justification of irrigation have not been done. An accurate analysis of the situation is needed, as well as a feasibility study and a cost-benefit study in order to determine the suitability of irrigation measures by areas, and the type and intensity of production.

The analysis of development potential in agriculture indicates that there are significant possibilities for further development of agriculture in South Primorska in connection with the development of tourism and recreation, and indirectly also with the protection of cultural and natural heritage (farm tourism, thematic paths, educational tourism, renewal of village centres and individual characteristic architectural landmarks). In nature preservation areas, new development options are opening up for agriculture, related also to the compensation for the loss of income due to the restrictions (ecological production, consideration of the dynamics of natural processes).

Fishery is important on the coastal strip and at sea, and mariculture is developed in three locations (fish farming and shellfish farming). Modern infrastructure is required to develop fishery, which includes the arrangement of suitable fishing ports and the space for the unloading of fish. These facilities are planned on the existing locations in Izola, Koper and Piran, while potential locations are also Ankaran, Strunjan and Seča, as related to the present locations of mariculture.

According to forestry definition, **woodlands** are a predominant landscape feature, covering the entire central part of the region, from Kras and across Brkini to the eastern part of Slovenian Istra. The prevailing feature is a mosaic of forest interwoven with agrarian and other land uses. Large forest complexes and the forests of Snežnik, Vremščica nad Slavnik. As in all other parts of Slovenia, the principle of acting with due care and attention was incorporated in forest management already in the past also in South Primorska, which resulted in the sustainability of forestry production. The principal belief in forest management is to ensure forest sustainability,

taking into account ecologically acceptable forms and the structure of forest stands, as well as the economy in all multipurpose forests and their social significance.

The conception in the field of agriculture, fishery and forestry is shown in the cartographic appendix **Agriculture**.

Integration of natural and cultural potentials of the region

The existing **national protected areas** are: Škocjanske jame Regional Park, the Natural Reserves of Škocjanski zatok, Strunjan, Strunjan–Stjuža, the natural monuments of Debeli Rtič and the Madona Cape, and the landscape parks of Sečovlje Saltpan and Strunjan. They mostly belong to the Natura 2000 areas or ecologically significant areas, as the areas largely overlap. Special emphasis should be put on the sea and the littoral, as a unique ecologically significant areas in the context of Slovenia. In the areas of Kras and Brkini and the wider area of Snežnik, the proclamation of regional parks has been proposed and in the areas of Dragonja and Glinščica Rivers, landscape parks have been proposed.

In South Primorska there are six areas of complex **protection of cultural heritage**, defined in the SDSS as the areas of national identity:

1. Kras,
2. Kras and Brkini,
3. partly the area of Vipavska Brda,
4. Bržanija and Moravška dolina,
5. Šavrini,
6. Strunjan.

These areas, which feature a high density of cultural heritage and numerous ties, most frequently historic ones, are a significant element of national identity which reflects in spatial features, forming a recognizable cultural landscape, mainly due to traditional, predominantly agrarian land use. Preserved husbandry modes are close to modern concepts of spatial planning, as they lay stress on co-natural management and the protection of resources with a view to ensure sustainable vitality of the area in all its meanings.

The objectives of the integration of the listed natural and cultural potentials of the region with an established management system are as follows:

- development of tourist products in connection with nature protection areas and cultural heritage;
- harmonisation of protected areas management regimes;
- preparation and implementation of common projects (development of tourist destinations, thematic paths);
- joint promotion and raising the awareness of local population and visitors;
- preservation and promotion of regional identity.

The conception in the field of the integration of natural and cultural potentials is shown in the cartographic appendix **Natural and cultural potentials of the region**.

Protection, use and management of waters

Within the region there are the following larger areas of groundwater that supply the existing water supply systems:

- Reka and Pivka catchment areas,
- Komen and Sežana Kras,
- Rižana Valley and Brkini hinterland,
- Dragonja Valley (Croatian territory).

Water protection areas for the Padež–Suhorka water source have already been defined. They are presented, together with other water protection areas, in the cartographic appendix **Flood, erosion and water protection areas**.

Due to the specific characteristics of the karstic area, the water sources are essentially more sensitive to the pollution of soil, water and air. The principal sources of pollution are urbanization and the unsolved problems of discharge and treatment of waste water, dispersed building, industry and agriculture, and a constant threat of eventual pollution from various sources, in particular related to ecological disasters. All water sources in the region must be properly protected by

national regulation. However, the most significant measure is the implementation of protection regimes. In addition, the future regional spatial development will ensure that the restrictions arising from the water protection requirements are adequately compensated by various development incentives and various forms of compensation.

Protection against natural disasters

In a minor part of the region, flood safety is inadequate because of urbanization in flood risk areas and in places still insufficiently regulated torrential watercourses (e.g. the rivers of Reka, Dragonja, Drnica, Badaševica with tributaries, and others). Flood risk exists also in the areas of the salt pans of Sečovelje and Strunjan due to inadequate high water dykes.

A high flood risk exists also in depression areas of Semedela Bonifika and Ankaran–Bertoki Bonifika (where rain water is discharged into the sea from three pumping stations), especially in the recent period due to intensive construction which severely reduces the retention capacity of the area.

In the past, many regulations of watercourses were carried out and the retention basins of Mola and Klivnik in the area of Ilirska Bistrica and Vanganel in Slovenian Istra constructed to ensure protection against high waters. In Slovenian Istra, some smaller water reservoirs were built for agricultural purposes.

Flood control works should be undertaken in areas of high flood risk with reference to the objectives of sustainable and ecological regulation of waters and aquatic ecosystems in order to reduce life-threatening events and material damage caused by both excessive and deficient precipitation.

Water regulation will involve non-construction and construction measures:

- non-construction measures will be directed particularly to public awareness raising with regard to natural processes and their incidence, sound management of risk areas, improved hydrometeorological forecasting, monitoring and recording of flood events, enhanced public warning and information on flood and landslide risks in the region and appropriate urbanization, adjusted to correspond both to the available quantity of water and flood and landslide risks.
- construction measures are still needed for water regulation, because centuries-long human activities, in particular settlement, have strongly intervened in natural processes of flood and catchment areas. In order to protect the existing settlement and to reduce harmful impacts of floods and landslides as well as to retain and preserve the quantity of water to enrich water reserves, the artificially regulated water regime should be preserved by construction works.

To this end, construction of the following facilities will be carried out:

- dykes, barrages and retention basins, dams, stabilised banks, channels and artificial canals and other water facilities, provided that no deterioration of conditions occurs;
- pumping stations, water catchments, pipelines, facilities for enriching the water quantity, while bearing in mind the regeneration capacity of aquifers;
- facilities for the improvement of hydromorphological parameters of water with a view to re-establish the connections between the rivers and their sources, flood areas and groundwater areas, which all contributes to higher on-site retention of water as well as to the improvement of ecological status of waters and aquatic ecosystems.

Increased concern should be paid to regular maintenance of the flow profiles of natural and artificial watercourses and constructed water facilities, as excessive overgrowth highly increases the harmful effect of waters (erosion and flood risk), while poor maintenance causes deterioration of water facilities, resulting in large damages to riverbeds and coastal land.

Special concern should be paid also to the regulation and maintenance of local water sources, because the majority of them is left to degradation and pollution, thus losing their function of alternative water supply in the event of failure of the primary water supply system.

Erosion areas

Erosion areas demanding stricter anti-erosion measures cover almost the entire areas, from the Kras Edge to the coast, i.e. the whole flysch area, as also the Brkini area. There are, however, also the erosion areas (at the margins of Vipavska Brda) that require normal anti-erosion measures.

Fire risk

Fire risk is an important factor in the region due to the dry and warm sub-Mediterranean climate in combination with degraded sites. Fire risk further increases due to traffic corridors crossing the region, particularly the railway.

The conception in the field of the protection against natural disasters is shown in the cartographic appendix **Flood, erosion and water protection areas**.

Coastal area management

The Slovenian coast is an area of outstanding significance due to its natural and environmental features, cultural heritage, a specific landscape with a distinctive identity, as also its economic potentials (tourism, maritime transport – the Port of Koper, fishery). However, the coastal area is highly limited.

The key environmental and spatial potentials of the coastal strip are the nature, cultural heritage, natural resources (fishing reserves, agriculture, forestry), recreational potential (bathing areas, promenades, tourist and recreation areas, green areas), urban, architectural and landscape qualities.

The main environmental and spatial pressures on the coastal strip arise on the one hand from vigorous urban development and tourism development (including the construction of tourism capacities, marinas, secondary homes, recreational infrastructure, etc.) and the associated road traffic, burdening of waters, increasing volume of waste, and on the other hand, from intensive development of the Port of Koper and the increase in maritime transport. Other pressures foreseen are connected to climate change, rising of water level and the resulting flood risk and damages due to extreme weather conditions.

To ensure that the coastal area remains a significant regional potential, the future development will be harmonised with the fundamental principles of sustainable development, while increasing the economic performance of the region and at the same time strengthening the environmental and social value of the coastal area.

Partnership approach is crucial to development and spatial planning of the coastal area. To this end, partnership will be consolidated to achieve integrated management of coastal area, joining the stakeholders in the field of regional development, spatial planning, water management, nature preservation, fishery, transport, protection of cultural heritage and others. Until the establishment of provinces, the partnership will work within the structure set up on the basis of the Promotion of Balanced Regional Development Act.

In their municipal spatial planning documents, the municipalities, in partnership with other stakeholders, will define the “**coastal strip**” comprising the sea, the inshore belt and the surrounding areas which are crucial for the preservation of natural values, the landscape, cultural heritage and for the development of recreation associated with the sea.

The objectives of the establishment of a coastal strip with a special management regime are:

- establishment of harmonised spatial planning rules along the entire length of the coast in municipal spatial planning documents;
- establishment of inter-municipal harmonised spatial conception for specific activities (moorings, operative coast for maritime activities);
- establishment of harmonised measures to disburden the coast by reducing the motor traffic, and management of the coast accessibility;
- preparation and implementation of common projects (coastal footpath along the entire coast length, construction of an island, the programme of green areas arrangement, the programme of bathing areas arrangement);
- development of tourist products related to the coastal strip and associated protected areas of nature and cultural heritage;
- harmonisation of coastal strip management regimes;
- joint promotion and raising the awareness of the citizens and the users of the coastal strip.

Detailed rules for spatial planning of the coastal strip will arise from the fundamental rules of the Spatial Order of Slovenia, taking into account specific guidelines defined within the framework of the expert groundwork of the Detailed Conception of Coastal Strip Spatial Arrangements. All

initiatives for actions on the coastal strip and its hinterland (e.g. Slovenian island, new water areas in the hinterland) will be first assessed within the meaning of their compliance with the expert groundwork, followed by the preparation of project documentation, from the policy concept, feasibility study, vulnerability studies, environmental impact assessments to the procedure of building permit acquisition and the spatial planning implementation act.

Recommendations for follow-up activities:

Due to the ever-increasing pressure on the use of the sea (inner sea, territorial sea) – transport, fishery and mariculture, recreation, protected areas, energy supply, etc. – a spatial plan will be prepared for the sea use, providing a spatially harmonised use of the sea and various use regimes. The municipalities will launch an initiative that the spatial plan be harmonised in the area of the whole Gulf of Trieste, in cooperation with partners from Italy and Croatia and their regional and local representatives respectively.

Description of spatial planning measures in the field of activities and land use in the landscape:

Measure	Objectives
Agriculture	<ul style="list-style-type: none"> ○ Ensure adequate accessibility of cultivated areas ○ Ensure flood protection of cultivated areas ○ Directing agricultural activities to the land with the most suitable conditions leading to the adjustment of land categorisation with its actual use ○ Removal of farms from pure residential areas to more suitable locations with better development potential
Result indicators	<ul style="list-style-type: none"> • Cultivated areas threatened by floods • Number of removed farms • Size structure of farms
Fishery development	<ul style="list-style-type: none"> ○ Arrange fishing ports and the places for unloading fish ○ Arrange first sale places for fishing products and the fish market
Result indicators	<ul style="list-style-type: none"> • Number of first sale places for fishing products • Number of arranged fishing ports and fish unloading places
Improvement of the economic value of forests	<ul style="list-style-type: none"> ○ Increase the forest openness by the reconstruction and construction of forest roads and sledges to reduce the cost of bringing in wood ○ Merger of forest properties
Result indicators	<ul style="list-style-type: none"> • Constructed and renewed forest roads • Size of forest properties
Protection, management and integration of cultural heritage	<ul style="list-style-type: none"> ○ Establish efficient management of areas and facilities of cultural heritage ○ Cultural heritage in use (tourist, cultural activities, dwellings, etc.) ○ Renewal of town centres and parts of settlements
Result indicators	<ul style="list-style-type: none"> • % of cultural heritage protection areas • Number of areas and facilities of cultural heritage in function • Number of spatial interventions not in compliance with the objectives of protected areas or facilities • Elaborated management plans • Number of facilities included in tourist of cultural offer of the region
Protection, management and integration of nature protection areas	<ul style="list-style-type: none"> ○ Establish efficient management of protected areas by defined managers and management plans ○ Establish recreational and interpretation infrastructure in protected areas ○ Favourable condition of species and habitats
Result indicators	<ul style="list-style-type: none"> • Size of nature protection areas • % of actively managed areas or the number of management plans • Number of spatial interventions not in compliance with the objectives of protected areas • Number of protected species and habitats in good condition (focus on maritime and littoral habitat types) • Number of tourist products based on the natural potentials of the region

Protection, use and management of waters	<ul style="list-style-type: none"> ○ Protection of water resources and their potentials regardless their present or future use ○ Preservation of natural watercourses and their water regime
Result indicators	<ul style="list-style-type: none"> ● Size of water protection areas with appropriate control over the implementation of protection regimes ● Quality of water resources ● Quality of watercourses and water quantity in summer time
Protection against natural disasters	<ul style="list-style-type: none"> ○ Achieve sustainable and ecological regulation of waters and aquatic ecosystems ○ Reduce the life risk and material damage due to excessive or inadequate precipitation ○ Preserve natural retention capacity (preservation of wetlands, dead river branches, groves), reduce impermeable areas, and direct the uses interfering with drainage regimes (urbanization, intensive agricultural areas) ○ Prevent unsuitable uses and actions in erosion areas ○ Ensure fire safety (forest cuts, construction and renewal of dry walls, buffer zones along railway lines)
Result indicators	<ul style="list-style-type: none"> ● Number of floods in urban and agricultural areas ● Number of erosion sites ● Size of retention areas ● Economic damage caused by floods
Coastal strip management	<ul style="list-style-type: none"> ○ Prepare spatial and project documentation for the arrangement of key sections of the coast, and tourist and recreational infrastructure (construction of an island offshore the town of Izola, arrangement of the coast between Koper and Izola upon the construction of a new high-speed road, renewal of the eastern part of Izola) ○ Implement priority investments (arrangement of individual parts of the path, arrangement of bathing areas, arrangement of the infrastructure in protected areas directly adjacent to the coast) ○ Prepare the measures for coastal area accessibility management
Result indicators	<ul style="list-style-type: none"> ● Number of implemented priority investments ● Length of natural coast

RDP 2007–2013 Projects	Description	Time frame	Institutions
Agrarian operations (Rural area, agriculture, fishery and forestry; Development of new and preservation of traditional products and services, promotion of nature-friendly farming, preservation of settlement)	Planning and construction of irrigation systems, arrangement of water reservoirs, completion of commassation, solving the ownership problems – preparation of expert groundwork and pilot projects.	2007–2013	Institute of Agriculture and Forestry
Arrangement of food processing facilities (Rural area, agriculture, fishery and forestry; Development of new and preservation of traditional products and services, promotion of nature-friendly farming, preservation of settlement)	Define and arrange the facilities for shared food processing plants enabling several farms to achieve a more competitive processing and production.	2009–2013	Institute of Agriculture and Forestry

Regulation of trade in fish (Rural areas, agriculture, fishery and forestry; Linking the supply and the market)	Arrange places for unloading of fish and arrangement of the fish market in Izola	2008–2013	
Improvement of the economic value of forests (Rural areas, agriculture, fishery and forestry; Improvement of the economic value of forests)	Arrange forest roads and sledges for improved cost efficiency of forest management	2007–2013	Forest owners
Establishment of management and integration of protected areas (Environment and environmental infrastructure; Cooperation with the Government on common projects)	Active protection of protected (natural and cultural) areas demands the establishment of an institutional model and the system of management. Active management of these areas will be established through management plans, integration and joint promotion of protected areas.	2010–2013	State

Recommendations for follow-up activities:

There are no comprehensive projects prepared for the measure **Agriculture**. The projects should be directed primarily to the establishment of spatial conditions for the development of agriculture and the infrastructure for the implementation of agricultural activities. Some projects (e.g., irrigation, construction of greenhouses, etc.) will demand the preparation of expert groundwork in the form of feasibility studies, environmental impact assessments, etc.

For the measure **Protection, use and management of waters**, close cooperation should be established between the local and national levels and, in particular, it is essential to achieve a coherent action of government institutions. The projects should be directed to overall solution of problems, with respect to natural values and the preservation of biotic diversity, as well as flood safety and favourable conditions for agricultural activities.

Horizontal measures

Cooperation

Measure	Objectives
Cross-border cooperation	<ul style="list-style-type: none"> ○ Strengthen the competitiveness of the region and urban potential ○ Establish partnerships with neighbouring regions/provinces (Province of Trieste, Province of Gorizia, Istra County, Primorsko-Goranska County)
Result indicators	<ul style="list-style-type: none"> ● A harmonised strategy of spatial development prepared in cooperation with neighbouring regions
Cooperation with the Government on common projects	<ul style="list-style-type: none"> ○ Establish partnerships for a more efficient action, in particular in the areas of development and location of transport network, protection of water sources and the management of water and the sea, appropriate use of agricultural land, establishment of protected areas management
Result indicators	<ul style="list-style-type: none"> ● Agreed upon water protection areas, regimes and the control over implementation ● Number of protected and manager areas ● Number of detailed plans
Cooperation with neighbouring regions (provinces)	<ul style="list-style-type: none"> ○ Exchange of information and experience ○ Interregional planning ○ Exploitation of synergic effects of planned actions

Result Indicators	<ul style="list-style-type: none"> • Conciliation meetings • Number of joint projects • Number of interregional expert groundwork and strategies
Inter-municipal cooperation on strategic spatial projects	<ul style="list-style-type: none"> ○ Strengthen the competitiveness of the region ○ Sound use of physical space and thoughtful distribution of functions between individual areas ○ Establish appropriate access to functional areas
Result indicators	<ul style="list-style-type: none"> • Number of intermunicipal/regional spatial plans • Number of common passenger connections • Number of common social services (cultural calendar, etc.)

Active land policy

Objectives of the measure	Instruments
<ul style="list-style-type: none"> ○ Impact on real estate prices ○ Protection of strategic development areas (areas of tourist facilities, business zones, the coast, etc.) ○ Accessibility of green areas and social services (ensuring the accessibility, free crossing and efficient access) 	<ul style="list-style-type: none"> ○ Enforcement of pre-emptive rights ○ Restrictions in real estate trade ○ Taxation (taxes, duties, compensations, subventions, favourable loans) ○ Determination of the relations between private and public accessible areas ○ Planning of budget funds for active land policy

A horizontal measure important for the achievement of the set spatial planning objectives is **Education and awareness**, even though this is not a spatial measure but above all an organizational measure and a measure of environmental protection policy. Education and awareness of local population and visitors should be achieved especially in the following areas: preservation of natural and cultural heritage, coastal area management, promotion of alternative mobility modes and efficient use of natural resources.

6. ANALYSIS OF THE COMPLIANCE OF SPATIAL DEVELOPMENT OBJECTIVES WITH THE OBJECTIVES OF STRATEGIC DOCUMENTS

6.1 COMPLIANCE WITH THE OBJECTIVES OF THE MEDITERRANEAN STRATEGY FOR SUSTAINABLE DEVELOPMENT

Objectives	Spatial development objectives	Analysis
Contribute to economic development by enhancing Mediterranean assets	<p>Establish a competitive cross-border polycentric network of settlements</p> <p>Improved internal and external integration of the region</p>	<p>The stated spatial development objectives contribute to the Mediterranean Strategy because they promote the development of a polycentric network of settlements where the more important settlements will be provided with appropriate economic zones contributing to the economic development, while taking into account special spatial criteria of the region. Improved internal and external integration of the region will contribute to a better flow of people, products and services and positively affect the economic development and the quality of life. The objectives of spatial development and the objectives of the Mediterranean Strategy for Sustainable Development strive for the equilibrium between the needs of an individual, the economic development and the environmental protection.</p>
Reduce social disparities by implementing the Millennium Development Goals and strengthening of cultural identity	<p>Establish competitive rural areas with a high quality of living</p> <p>Strengthening of sustainable communities (urban centres)</p> <p>Strengthening the identity and the attractiveness of the area</p>	<p>The objective of the Mediterranean Strategy for Sustainable Development, which supports often neglected endangered rural areas is in compliance with the objective of the Conception of Spatial Development to establish a competitive rural area with a high quality of living. The objective of the Mediterranean Strategy supports also sustainable development of urban centres, which will be attained by strengthening of sustainable communities or urban centres. Promotion of the Mediterranean cultural diversity, supported by the objective of the Mediterranean Strategy, will be achieved by strengthening the identity and attractiveness of South Primorska, which is the objective of spatial development.</p>
Change unsustainable production and consumption patterns and ensure sustainable management of natural resources	<p>Sustainable management of natural resources</p> <p>Strengthening of sustainable communities (urban centres)</p>	<p>Sustainable management of natural resources and strengthening of sustainable communities (urban centres) will contribute to the objective of the Mediterranean Strategy for Sustainable Development, because municipal infrastructure will develop, particularly in the fields of water supply, discharge and treatment of waste water, waste management and renewable energy sources (solar energy, wind, wood biomass), etc. The objectives are in accordance also as regards the change in production and consumption patterns by utilizing clean technologies, suitable infrastructure, efficient public transport and renewable energy sources.</p>
Improve governance at local, national and regional levels	/	<p>Spatial development objectives do not have a direct impact on the improvement of management on the local, regional and national levels.</p>
Priority areas	Spatial development objectives	
Improve water resources management	<p>Strengthening of sustainable communities (urban centres)</p> <p>Sustainable management of natural resources</p>	<p>The exposed spatial development objectives are in compliance with the first priority area of the Mediterranean Strategy as they strive for the protection of water resources through legislative measures and the actual implementation of protection regimes. The spatial measures are intended for the supply of adequate quantity of drinking water needed by the population and the economy and the establishment of regional water supply network.</p>

<p>Improve the management of energy needs and reduce the impacts of climate changes</p>	<p>Strengthening of sustainable communities (urban centres) Sustainable management of natural resources</p>	<p>The spatial development objectives do not have a direct impact on the reduction of climate change, but only an indirect one. However, the exposed spatial development objectives have a direct effect on the improvement of the management of energy needs as they will improve the energy supply infrastructure. In the area of South Primorska, a gas distribution network will be constructed and the utilisation of renewable energy sources promoted (solar, wind, wood biomass). The measures support energy efficient building, so that the Conception will contribute to the improvement of energy needs management.</p>
<p>Sustainable mobility by appropriate management of traffic flows</p>	<p>Strengthening of sustainable communities (urban centres) Improved internal and external integration of the region Establishment of competitive rural area with high quality of living Strengthening the identity and attractiveness of the region</p>	<p>The priority area is in accordance with the exposed spatial development objectives. The spatial development objectives strive for the development of sustainable mobility, which will strengthen the competitiveness of the region, and the development of less developed rural areas and at the same time provide for a better quality of living in urban as well as in rural centres. The development of transport infrastructure will not be confined to road connections only, but it will be directed to more sustainable mobility modes, such as the railway, maritime transport, and walking and cycling in urban areas.</p>
<p>Sustainable tourism as the leading economic sector</p>	<p>Improved internal and external integration of the region Strengthening the identity and attractiveness of the region</p>	<p>The exposed spatial conception objectives are in compliance with the priority area as they affect the development of sustainable tourism through better transport connections, inside and outside the region, and by strengthening the identity and attractiveness of the area. Sustainable tourist infrastructure will provide benefits to local communities as well as to tourist companies and tourists.</p>
<p>Sustainable development of rural areas and high quality of agricultural production</p>	<p>Establishment of competitive rural area with high quality of living Improved internal and external integration of the region Sustainable management of natural resources</p>	<p>The exposed spatial development objectives are in accordance with the priority area as they support sustainable development of rural areas, revitalization of rural areas, better connection and protection of natural resources. The measures will contribute to the improved internal integration of the region and sustainable use of natural resources, which will reflect in the improvement of the quality of living in rural areas.</p>
<p>Sustainable development of urban areas</p>	<p>Strengthening of sustainable communities (urban centres) Improved internal and external integration of the region Sustainable management of natural resources</p>	<p>The exposed spatial development objectives contribute to sustainable development of urban areas by better connections, strengthening of sustainable communities and sustainable management of natural resources. The objectives will contribute to the improvement of the quality of living in urban centres and to the reduction of negative environmental impacts.</p>
<p>Sustainable management of the sea, coastal areas and natural resources</p>	<p>Sustainable management of natural resources Improved internal and external integration of the region</p>	<p>Both objectives of spatial development are in compliance with the priority area as they affect sustainable management of the sea, coastal area and natural resources. The goal of improved connections will essentially affect sustainable development of maritime transport, new passenger and ferryboat lines and other. Along these lines, the principle of acting with due care and sustainable management of natural resources will be applied.</p>

6.2 COMPLIANCE WITH THE OBJECTIVES OF THE EU STRATEGY FOR SUSTAINABLE DEVELOPMENT

Objectives	Spatial development objectives	Analysis
Limit climate change and its costs and negative effects to society and the environment	Improved internal and external integration of the region	The spatial development objective is consistent with the objective of the EU Sustainable Development Strategy, as by improved transport connection and the development of infrastructure, environment-unfriendly road traffic will be rerouted to railways, maritime transport, walking and cycling and thus contribute to the reduction of air pollution and indirectly also limiting the climate change.
Ensure that the transport systems meet society's economic, social and environmental needs whilst minimising their undesirable impacts on the economy, society and the environment	Improved internal and external integration of the region	The spatial development objective that supports the improvement of internal and external integration of the region and the improvement of mobility, will contribute to the establishment of a system satisfying the economic, social and environmental needs simultaneously. The objective will have impacts on the improvement of transport and the rerouting of road transport to other, more sustainable mobility modes.
Promote sustainable consumption and production patterns	Strengthened sustainable character of tourism development	Development of specific offer, in compliance with the principles of sustainable tourism development, contributes to the same objective stipulated in the EU Sustainable Development Strategy.
Improve management and avoid overexploitation of natural resources, recognising the value of ecosystem services	Sustainable management of natural resources Improved internal and external integration of the region	Among other things, the objective of the EU Sustainable Development Strategy emphasises the improvement of water resources management and an increase in the utilisation of alternative energy sources (biomass). This is exactly the spatial planning objective which strives also for sustainable and sound management of natural resources.
Promote good public health on equal conditions and improve protection against health threats	/	The Conception does not deal with this issue.
Create a socially inclusive society by taking into account solidarity between and within the generations and to secure and increase the quality of life of citizens as a precondition for lasting individual well-being	/	The Conception does not deal with this issue.
Actively promote sustainable development worldwide and ensure that the European Union's internal and external policies are consistent with global sustainable development and its international commitments	/	The Conception does not deal with this issue.

6.3 COMPLIANCE WITH THE NATIONAL STRATEGY OF SUSTAINABLE DEVELOPMENT

SDSS objectives	Spatial development objectives	Analysis
Rational and effective spatial development	Establish a competitive cross-border polycentric network of settlements Establish competitive rural areas with a high quality of living Improved internal and external integration of the region Strengthening of sustainable communities (urban centres) Strengthening the identity and the attractiveness of the area Sustainable management of natural resources	South Primorska is a border region. Therefore, the spatial development objectives of South Primorska are directed also to international connections and cooperation with neighbouring countries, which demands the strengthening of urban and rural areas and taking advantage of the attractiveness of the area. The proposed spatial development objectives are directed to the objectives of the National Strategy of Sustainable Development.
Polycentric development of the network of cities, towns and other settlements	Establish a competitive cross-border polycentric network of settlements	Cross-border cooperation and polycentric development of the region are the preconditions for the preservation and improvement of competitiveness. The spatial development objective is therefore consistent with the objective of the National Strategy of Sustainable Development.
Increased competitiveness of Slovenian towns in Europe	Establish a competitive cross-border polycentric network of settlements	Polycentric development and cooperation with neighbouring regions is a precondition for the preservation and development of competitiveness. The spatial development objective therefore contributes significantly to the competitiveness of the region.
High-quality development and attractiveness of cities, towns and other settlements	Establish a competitive cross-border polycentric network of settlements Strengthening of sustainable communities (urban centres)	Development of urban centres and strengthening of their attractiveness will increase the region's competitiveness. The objective is in accordance with the objective of the National Strategy of Sustainable Development.
Harmonious development of areas with common spatial development characteristics	Strengthening of sustainable communities (urban centres) Strengthening the identity and the attractiveness of the area	Preservation and strengthening of the identity will contribute to the diversification of the region and thus enable the development of areas with common spatial development characteristics.
Complementarity of rural and urban functions	Establish a competitive cross-border polycentric network of settlements Establish competitive rural areas with a high quality of living	Polycentric development and appropriate distribution of functions between rural and urban areas is a precondition for the preservation and improvements of competitiveness. Both spatial development objectives contribute importantly to the complementarity of rural and urban functions.
Integration of infrastructure corridors with the European infrastructure systems	Improved internal and external integration of the region	Integration and involvement in all international networks is a condition for the preservation of competitiveness. The objective will contribute to the integration of infrastructure networks in the region and wider.
Prudent use of natural resources	Sustainable management of natural resources	Sustainable use of natural resources will ensure the preservation of identity and regional features and thus also the attractiveness of the region. The objective is in compliance with the objective of prudent use of natural resources.
Spatial development harmonised with spatial limitations	Strengthening of sustainable communities (urban centres) Strengthening the identity and the attractiveness of the area	Prudent use of physical space is essential for the preservation and improvement of the quality of living in the region. Both objectives contribute to the attainment of the set spatial development goals.
Cultural diversity as the foundation of the national spatial identity	Strengthening the identity and the attractiveness of the area	Prudent use of physical space is essential for the preservation and improvement of the quality of living in the region. Both objectives contribute to the attainment of the set spatial development goals.
Nature conservation	Sustainable management of natural resources	Prudent use of physical space is essential for the preservation and improvement of the quality of living in the region. Both objectives contribute to the attainment of the set spatial development goals.
Environmental protection	Strengthening of sustainable communities (urban centres) Sustainable management of natural resources	Prudent use of physical space and construction of municipal infrastructure is essential for the preservation and improvement of the quality of living in the region. Both objectives contribute to the attainment of the set spatial development goals.

7. IMPACT ASSESSMENT OF THE CONCEPTION OF SPATIAL DEVELOPMENT OF SOUTH PRIMORSKA

The Conception of Spatial Development of South Primorska (hereinafter referred to as “the Conception”) comprises the Conception of Settlement, the Conception of Transport Infrastructure Management, the Conception of Municipal infrastructure Management and the Conception of Activities and Land Use in the Landscape.

7.1 METHOD OF IMPACT ASSESSMENT OF THE CONCEPTION OF SPATIAL DEVELOPMENT OF SOUTH PRIMORSKA

The impact assessment of the Conception was carried out in several phases:

- (1) setting up the environmental objectives of the Conception and their consistency with the environmental goals of national strategic documents;
- (2) examining individual spatial conceptions (protected areas/restricted zones);
- (3) assessing the impact of the Conception on the environmental objectives.

In the first phase of the assessment of the Conception’s impacts, the environmental objectives were determined, on the basis of the present situation, for a spatial act, in this case the Conception of Spatial Development of South Primorska. Moreover, the consistency of the set environmental objectives within the Conception was evaluated in relation to the objectives laid down in national strategic documents (National Environmental Action Plan 2005–2012). The purpose of the examination of the consistency was to ensure that the Conception would contribute to the attainment of national environmental goals.

In the second phase, the interference of the Conception with protected areas, the NATURA 2000 areas, ecologically significant areas, natural values, water protection areas, the areas of cultural heritage, and flood and erosion areas was examined on the basis of descriptions, guidelines, measures of particular conceptions. The examination results were presented in a tabular form. The results served for the impact assessment of the Conception.

In the third phase, positive and negative impacts on the environmental objectives were defined on the basis of descriptions, guidelines and measures of individual conceptions and the examination results (protected areas/restricted zones). Actually, the Conception impact assessment was done in relation to the set environmental objectives. The question written down was: Does the Conception contribute to the achievement of the set environmental objectives?

7.2 ENVIRONMENTAL OBJECTIVES

On the basis of the analysis of the situation, the following environmental objectives were defined:

- Sustainable use of natural resources
- Improved air quality
- Good water status
- Efficient waste management
- Reduced noise levels
- Preserved nature
- Good living conditions
- Preserved cultural heritage
- Efficient transport

The environmental objective **Sustainable use of natural resources** relates to sustainable use of drinking water (reduced consumption of drinking water per inhabitant and the consumption of water in industry), physical space or land (rational use of land) and the utilisation of renewable energy sources. The objective is directed towards the achievement of the maximum sustainable use of all natural resources.

The environmental objective **Improved air quality** refers to the emission of pollutants into the air (from various activities as also the emission of greenhouse gas). The objective is meant for the

reduction of emissions (achievement of limit or target values for NO_x by 2010, SO₂ and PM₁₀ by 2005, NO₂ and Pb by 2010, CO by 2005, benzene in ozone by 2010, reduction in the emission of greenhouse gas by 8% in the period 2008 – 2012).

The environmental objective **Good water status** covers the status of surface waters (physical and chemical condition, morphological characteristics of watercourses) the status of groundwater and the status of the sea; therefore, it is oriented towards the improvement of water status. The purpose of this objective is to ensure good water status by 2015, as stipulated in the National Environmental Action Plan 2005–2012.

The environmental objective **Efficient waste management** refers to the management (collection, treatment, disposal) of urban and building waste. The objective is directed to the reduction of the volume of deposited waste.

The environmental objective **Reduced noise levels** relates to the exposure of the population to noise. Noise levels, causing conflicts due to the exposure of the population, can be reduced by appropriate location of activities in the physical space. If achieved, the objective will reduce noise emission and ensure noise levels below the limit values.

The environmental objective **Preserved nature** relates to the condition of species and habitats, and protected areas. The objective is directed to ensuring favourable condition of species and habitat types and to the preparation of management plans for protected areas.

The environmental objective **Good living conditions** deals with the accessibility of all services (provision of infrastructure, accessibility of health care, education, green areas, etc. for all inhabitants) and with the areas that may threaten good living environment (floods, erosion, landslides). The objective is directed towards the provision of maximum accessibility to services and to the non-interference in the restricted zones (flood, erosion areas) and to ensuring safety in these areas.

The environmental objective **Preserved cultural heritage** covers the buildings and all other areas of cultural heritage (archaeology, settlement, garden architecture, cultural landscape). The objective is dedicated to the preservation of cultural heritage, especially through utilisation and heritage function.

The environmental objective **Efficient transport** covers the use of transport means which are less harmful to the environment (public transport, cycling, walking) and the rerouting of freight to railways. The objective is directed to the promotion of the use of public passenger transport, cycling and walking and to the reduction of road freight transport.

Table 2: The analysis of compliance and integration of the Plan environmental objectives with the environmental objectives of strategic documents

Environmental objectives ⁷		Plan environmental objectives	Analysis
Air	Reduction of greenhouse gas emission for 8% during the period 2008–2012 by reference to 1986:	<i>Resolution on National Environmental Action Plan 2005–2012</i>	<p>The Plan environmental objectives will improve the quality of air, introduce sustainable use of natural resources and promote efficient transport. The use of less environmentally harmful transport modes and rerouting of freight to the railways will reduce the emissions into the air.</p> <p>The Plan environmental objective <i>Improved air quality</i> will reduce the emission of pollutants into the air and the emission of greenhouse gas below the limit values. The environmental objective <i>Sustainable use of natural resources</i> is directed, among other things, to the reduction of energy consumption and the utilization of renewable energy sources</p> <p>The Plan environmental objectives are consistent with the National Environmental Action Plan 2005–2012 and will contribute to its realisation.</p>
	<ul style="list-style-type: none"> - 12% share of renewable energy sources in total energy supply by 2012, - reduction of energy intensity (for 30% by 2015 by reference to 2000), - 2% share of bio-fuel in transport by 2005 and 5.75% by 2010, - 16% share of CHP in electricity generation by 2012, - 30% lower energy consumption in new buildings and possible reduction in energy consumption of the public sector by 15% 		
	Achieving limit or target values in particular areas for:		
	<ul style="list-style-type: none"> - NO_x by 2010, - SO₂ and PM10 by 2005, - NO₂ and Pb by 2010, - CO by 2005, - Benzene and ozone by 2010. 		
	Reduction in national emission of SO ₂ , NO _x , HOS and NH ₃ by 2010.	<ul style="list-style-type: none"> - Improved air quality - Sustainable use of natural resources - Efficient transport 	
	Reduction in the emission of SO ₂ , NO _x , CO and dust from old combustion plants and large combustion plants and ensuring that annual emission values from such plants are not exceeded.		

⁷ **Environmental objectives** are commitments defined in ratified international treaties or the European Union regulations that refer to excessive environmental impacts and global pollution, and safety goals in the areas of special legal regime, comprising the guidelines, grounds, limitations and prohibitions regarding the environmental protection, nature preservation, safeguarding of natural resources and cultural heritage. Environmental objectives incorporate also other objectives, defined in environmental platforms, programmes and plans in the area of environmental protection, the documents dealing with the protection against natural and other disasters and other legal documents dedicated to the implementation of the principles of environmental protection and sustainable development (Decree laying down the content of environmental report and on detailed procedure for the assessment of the effects on certain plans and programmes on the environment (OG RS No. 73/2005))

<p>Water</p>	<p>Good water status by 2015:</p> <ul style="list-style-type: none"> - improved groundwater quality and the achievement of limit values of nitrates in drinking water, - improved groundwater quality and the achievement of limit values of pesticides in drinking water and drinking water sources, - ensuring adequate collection, discharge and treatment of waste waters, - termination or gradual removal of emissions or leakage of hazardous substances, - prevention of pollution or other types of loading that may impair the quality and wholesomeness of water bodies or their parts utilised for abstraction or intended for drinking water supply or production of beverages, - preservation of the quality of bathing waters and prevention of pollution of other types of loading that may impact on the status of water bodies or their parts designated as bathing water areas or the wholesomeness of bathing water in bathing water areas, - maintaining the water quality in order to support the life of important species of freshwater fish, - Ensuring sufficient volume of water intended for the supply of the population with drinking water, - Improvement in the availability of water for use and the status of water and the associated ecosystems, - decrease in flood risk, - protection and preservation of marine environment. 		<ul style="list-style-type: none"> - Good water status - Good living conditions - Sustainable use of natural resources 	<p>The environmental objectives of the Plan will ensure good water status, good living conditions and sustainable use of natural resources.</p> <p>The Plan environmental objective <i>Good water status</i> is directed to the achievement of a good status of surface waters (physical and chemical condition, morphological), the status of groundwater and the status of the sea; therefore, it is oriented towards the improvement of water status. The Plan environmental objective <i>Good living conditions</i> covers the flood safety. The Plan environmental objective <i>Sustainable use of natural resources</i> is, among other things, directed to reducing the drinking water consumption by households and industry.</p> <p>The Plan environmental objectives are in accordance with the objectives of the National Environmental Action Plan 2005–2012 and will contribute to their implementation. In particular, the objectives will contribute to the goals related to the improvement of water status, provision of adequate water quantities for water supply, reduced flood risk and the preservation of protection of the sea environment. The Plan environmental objectives will contribute to the attainment of the National Environmental Action Plan 2005–2012 objectives.</p>
<p>Soil</p>	<p>Prevent further conversion of the best agricultural land into the land for other uses.</p>		<ul style="list-style-type: none"> - Sustainable use of natural resources 	<p>The Plan environmental objectives are to ensure sustainable use of natural resources. It is oriented to rational land use.</p> <p>The Plan environmental objective will contribute to the implementation of the National Environmental Action Plan 2005–2012 objective. It will ensure rational land use and consequently, the preservation of agricultural land. However, it is not quite certain that the Plan environmental objective will prevent all interventions into agricultural land.</p>
<p>Noise</p>	<p>Definition of noise exposure levels (elaboration of strategic noise maps and planning of noise reduction measures) and public information on noise exposure.</p>		<ul style="list-style-type: none"> - Reduced noise level 	<p>The Plan environmental objective is directed to the reduction of the number of people exposed to excessive noise by appropriately locating the activities, so that the noise in residential areas reduces and the emission of noise decreased.</p> <p>The Plan environmental objective is in compliance with the National Environmental Action Plan 2005–2012 objective. Both objectives are oriented towards the reduction of noise and thus the Plan Environmental objective will contribute to the attainment to the attainment of the National Environmental Action Plan 2005–2012 objectives.</p>

<p>Waste</p>	<p>Closing of the circular material flow in order to define and examine the life cycles of sources and goods by defining the optimum proportion of waste reuse and recovery.</p> <p>Reduced volume of waste through the integration of production and consumption patterns and habits, ways of life, technological improvements, economic activities and measures, demographic changes.</p>		<ul style="list-style-type: none"> - Efficient waste management 	<p>The Plan environmental objective is intended to ensure regulated infrastructure for the collection and disposal of waste.</p> <p>The Plan environmental objective is consistent with the objective of the National Environmental Action Plan 2005–2012, Both objectives are directed to the reduction of waste volume, both created and deposited. The Plan environmental objective will contribute to the achievement of the National Environmental Action Plan 2005–2012 objectives.</p>
<p>Nature and biotic diversity</p>	<p>Preservation of a high biodiversity level and termination of the decline in biodiversity by 2010:</p> <ul style="list-style-type: none"> - maintaining or the achievement of favourable status of endangered species and habitats, - maintaining or the achievement of a favourable status (extent and quality) of species and habitat types for which the areas were determined important for the preservation of biodiversity (ecologically significant areas, Natura 2000 areas, Ramsar localities), - ensuring sustainable use of biodiversity elements and co-natural interference with natural environment.. <p>Protection of natural values:</p> <ul style="list-style-type: none"> - preservation of features for which the parts of nature have been defined as a natural value of a certain type and also all other feature to the maximum extent, - recovery of damaged or destroyed natural values, - ensuring the use of natural values in a way that does not endanger them, - ensuring ex-situ protection of natural values which preservation in-situ is not possible. 		<ul style="list-style-type: none"> - Preserved nature 	<p>The Plan environmental objective will ensure favourable condition of species and habitats and define the protected areas provided with managers and development plans.</p> <p>The Plan environmental objective is in compliance with the objectives of the National Environmental Action Plan 2005–2012 and will contribute to the attainment of its objectives.</p>
<p>Urban environment</p>	<p>Establishment of a long-term, uniform and overall policy for the improvement of the quality of life in urban areas with indicators and revival of towns so that they become attractive to citizens, not detrimental to the health and ensuring high quality of life.</p>		<ul style="list-style-type: none"> - Good living conditions 	<p>The Plan environmental objective will provide access to services and reduce the risks (floods, erosion).</p> <p>The Plan environmental objective is in compliance with the objectives of the National Environmental Action Plan 2005–2012 and will contribute to the attainment of its objectives.</p>
<p>Cultural heritage</p>	<ul style="list-style-type: none"> - Maintenance and renewal of cultural heritage and prevention of its endangering. - Ensuring material and other conditions for the realisation of the cultural function of the heritage, regardless its intended use. - Ensuring public accessibility of heritage and enabling its study and examination. - Prevent the interventions which may change the characteristics, content and shape and consequently, the value of heritage. - Promotion and development of the heritage system. - Preservation and protection of the heritage is the responsibility of each and all of us. - The heritage must be preserved and protected under any circumstances. 	<p><i>Cultural Heritage Protection Act</i></p>	<ul style="list-style-type: none"> - Preserved cultural heritage 	<p>The Plan environmental objective will improve the condition and reduce the endangerment of cultural heritage (also by the utilisation of facilities).</p> <p>The Plan environmental objective is in compliance with the objectives of the National Environmental Action Plan 2005–2012 and will contribute to the attainment of its objectives.</p>

7.3 INTERFERENCE OF THE CONCEPTION WITH PROTECTED AREAS/ RESTRICTED ZONES

In this phase of impact assessment, the protected areas and restricted zones expected to be affected by individual conceptions or planned activities/facilities were examined and the extent of impact assessed. The survey was limited particularly to the examination of the conceptions or planned activities that had already been spatially defined. Interventions in protected areas/restricted zones were studied on the basis of cartographic appendices to the Conception. For each of the four conceptions, it is listed in a table under Notes, which envisaged activities were examined or a reason is stated why a conception was not studied. The survey results are shown in a tabular form (Table 3).

Table 3: Interference of the Conception with protected areas/restricted zones

Conception	Notes	Protected areas	Nature 2000 areas	Ecologically significant areas (ESA)	Natural values	Water protection areas	Cultural heritage	Flood areas	Erosion areas
Settlement conception									
Establishment of cross-border polycentric network of settlements (Map: Settlement)	Due to the contents of the spatial conception, the interferences with the protected areas/restricted zones were not examined. It is envisaged primarily to establish a network of urban centres (supplementation of the functions of individual settlements) and an increase in settlement density of the existing settlements								
Establishment of support economic infrastructure network (Map: Economy)	<u>Locations of foreseen economic zones were examined.</u>	Incubator in regional park (near Sežana), business zone of level 3 (at Divača, Podgrad, Starod, Knežak), business zone of level 1 (at Hrpelje).	No interference	Business zone of level 2 (Hrpelje), business zone of level 3 (Sežana), Knežak, Starod), incubator (Sežana, Koper).	Business zone of level 3 at Žusterna.	Business zone of level 3 (Hrpelje) interferes with NV of regime 3.	Business zone of level 2 (Hrpelje) interferes with CH, in CH of complex protection – business zone of level 3 (Divača).	No interference	Business zone of level 1 in Koper, business zone of level 2 in Ilirska Bistrica, business zones of level 3 (Žusterna, Piran).
Establishment of tourist infrastructure network and the support environment for tourist destination management (Maps: Economy, Footpaths, Cycle tracks, Wine trails)	Tourism development based on the development of particular destinations: Istra, Kras, Snežnik. It is envisaged to modernize the existing infrastructure, to invest in support infrastructure, marketing of products and services. Thematic paths (wine trails) and cycle routes shown in maps exist already. <u>The location of Slovenian island was examined.</u>	No interference	Nature 2000 area in the vicinity.	Construction of Slovenian Island interferes with ESA, the sea and the littoral (posidonia site)	No interference	No interference	No interference	No interference	No interference

Conception of transport infrastructure management									
Map: Transport	<u>Locations of new railway lines, logistics centres and developments in the Port of Koper were examined.</u>	Regional logistics centre in Sežana and new railway connection (across the landscape park).	New railway connection goes through the Natura 2000 area.	New railway line crosses the ESA. The logistics centre in Sežana located in ESA. Expansion of the Port of Koper interferes with ESA.	New railway line crosses the NV area. The logistics centre in Sežana located in NV area. Expansion of the Port of Koper in the vicinity of NV	New railway line crosses the WPA of regime 4. The logistics centre in Sežana located in WPA of regime 4.	Interference of new railway line and Bertoki logistics centre with the CH area. New railway line crosses the area of complex CH protection.	No interference	New railway line and Ilirska Bistrica logistics centre interfere with the erosion area.
Map: Transport – road network	<u>Locations of new road connections were examined.</u>	A section of the new motorway connection runs through the regional park.	A section of the new motorway connection goes through the Natura 2000 area.	A section of the new motorway connection goes through ESA.	A section of the new motorway connection goes through NV area.	No interference	A section of new motorway connection interferes with the CH area. A section of new motorway connection interferes with the area of complex CH protection.	A section of new motorway connection interferes with flood areas.	All planned motorway connections run through erosion areas.
Map: Sustainable mobility	Due to the contents of the spatial conception, <u>the interferences with the protected areas/restricted zones were not examined.</u> It is envisaged primarily to enhance the public transport connections (motor traffic, maritime traffic).								
Conception of municipal infrastructure management	Locations of Padež retention basin and regional gas pipeline were examined. Locations of TP (for most TP locations are not defined), regional waste management centre (location not defined), wind power plant locations (not defined) were not examined.								

Map: Water supply	<u>Locations of Padež retention basin and the regional water supply network were examined.</u>	A section of envisaged regional water supply network crosses the regional park.	A section of envisaged regional water supply network crosses the Natura 2000 area.	A section of envisaged regional water supply network crosses the ESA.	NV area in the vicinity of Padež retention basin.	A section of envisaged regional water supply network crosses the WPA of regimes 3 and 4.	A section of envisaged regional water supply network crosses the area of complex CH protection	No interference	Padež retention basin and regional water supply network in erosion area.
Map: Municipal infrastructure	<u>TP locations were not examined (no location as yet for most of them).</u>								
Map: Energy infrastructure	<u>Gas pipeline location was examined.</u>	Envisaged gas pipeline crosses the regional park.	Envisaged gas pipeline crosses the Natura 2000 area.	Envisaged gas pipeline crosses the ESA.	No interference	Envisaged gas pipeline crosses the WPA of regime 4.	Envisaged gas pipeline crosses the area of complex CH protection.	No interference	Envisaged gas pipeline crosses the erosion area.
Conception of activities and land use in the landscape (Maps: Agriculture, Natural and cultural potential of the region)	Due to the contents of the spatial conception, <u>the interferences with the protected areas/restricted zones were not examined.</u> The orientation is envisaged to co-natural modes of production, only agricultural areas are defined.								

7.4 ASSESSMENT OF THE CONCEPTION'S IMPACT ON ENVIRONMENTAL OBJECTIVES

Objective: Sustainable use of natural resources

The following guidelines/activities will have a **positive impact** on the attainment of the objective:

- increased density within the settlements (reurbanization, revitalization of settlements);
- land for the development of activities provided inside the settlements;
- reactivation of degraded and weakly exploited land within the settlements for economic needs;
- promotion of energy efficient buildings;
- concentration of tourism in tourist zones;
- utilization of renewable energy sources;
- preservation of forest areas;
- preservation and promotion of appropriate use of agricultural land.

The following guidelines/activities may have a **negative impact** on the attainment of the objective:

- irrigation of agricultural land (in terms of water use).

The environmental objective is directed towards sustainable use of natural resources. The Conception guidelines will contribute to the achievement of the environmental objective primarily in terms of rational land use and the utilisation of renewable energy sources. However, it will contribute less to the part of the objective relating to the reduction of drinking water consumption per inhabitant and the consumption of water by industry. It is foreseen to construct the Padež–Suhorka retention reservoir, which will on a long term ensure the required quantity of drinking water for the inhabitants of the whole region. The Conception provides guidelines intended for the reduction of drinking water consumption, but these are environmental guidelines and not spatial planning guidelines. According to the forecast, the consumption of water by industry will not reduce due to the planned irrigation of agricultural land. However, a guideline is given that it is necessary to carry out detailed analyses of the situation, a feasibility study and a cost-benefit study to answer the question of suitability of irrigation actions by areas, types and intensity of agricultural production.

Objective: Improved air quality

The following guidelines/activities will have a **positive impact** on the attainment of the objective:

- strengthening of public transport;
- gas distribution network (heating);
- modernization of road network (increase in the fluidity of transport);
- utilization of renewable energy sources;
- rerouting of freight transport to railways.

The following guidelines/activities may have a **negative impact** on the attainment of the objective:

- development of tourism (increase in traffic flow);
- construction of motorways (increased traffic flow);
- increased maritime transport (pollution emission into the air and the sea);
- development of the Portorož Airport.

The environmental objective is directed towards the reduction of pollution emission into the air. On the one hand, the Conception foresees the activities reducing the emission of pollutants into the air (public passenger transport, cycle tracks, footpaths, use of renewable energy sources, reduced need for motorized mobility due to better access to social services and the infrastructure for alternative transport mode, increased fluidity of roads, etc.), but on the other hand it may be expected that traffic flow will increase (increased road, maritime and air transport) and consequently also the quantity of pollutants in the air. In addition to spatial planning and management measures defined in the Conception, many other measures should be carried out to reduce emissions into the air (monitoring the compliance with environmental legislation requirements, organization of transport system, economic measures and incentives, promotion and public awareness, etc.).

Objective: Good water status

The following guidelines/activities will have a **positive impact** on the attainment of the objective:

- municipal infrastructure (sewage system, waste water treatment plants);
- protection and preservation of water sources;
- increased settlement density (possibility of connection to the sewage system);
- preservation of natural watercourses and their natural regime.

The following guidelines/activities may have a **negative impact** on the attainment of the objective:

- increased maritime transport (development of the Port of Koper, passenger maritime transport);
- Slovenian island (tourism development);
- agriculture (however, sustainable agriculture foreseen);
- interference of activities with the water protection areas.

The environmental objective is directed towards the achievement of good water status by 2015. The Conception will contribute to the attainment of the environmental objective as it provides guidelines and measures to improve the status of surface waters, groundwater and the sea, because the construction of municipal infrastructure will reduce the input of pollutants into waters. The legislation covering the water protection areas should be duly considered for activities and structures interfering with water protection areas. It is expected that maritime transport will increase, both freight and passenger, which may result in deterioration of the quality of sea water; consequently, monitoring should be duly carried out of the compliance with legislation requirements and the envisaged mitigation measures to minimise negative impacts of maritime transport on maritime environment. The envisaged development of passenger maritime traffic between coastal towns is a sustainable alternative to road motor transport.

Objective: Efficient waste management

The following guidelines/activities will have a **positive impact** on the attainment of the objective:

- separated collection of waste has already been introduced in all municipalities.

The following guidelines have a **negative impact** on the attainment of the objective:

- increasing volume of waste;
- filling-up of the existing landfills;
- there is no location defined for the regional waste management centre.

The efficient waste management objective is intended for the improvement of urban and building waste management (collection, treatment, disposal) and particularly to the reduction of waste volume. Adequate separated waste collection has been introduced in all municipalities of the region, but as the existing landfills are filling up, a suitable waste recovery has not been secured. There is still no location defined for the central waste management centre, engaged particularly in waste recovery. To achieve this environmental objective, a regional waste management centre will have to be established in order to reduce the volume of deposited waste by appropriate recovery measures. The Conception does not define measures relating to building waste.

Objective: Reduced noise levels

The following guidelines will have a **positive impact** on the attainment of the objective:

- appropriate location of residential and production activities;
- appropriate location of tourist and residential programmes.

The following guidelines may have a **negative impact** on the attainment of the objective:

- construction of transport infrastructure.

The environmental objective is meant for the reduction in the number of inhabitants exposed to noise and to reduce noise emission. Implementation of the proposed measures will contribute to the achievement of the segment related to the reduction in the number of inhabitants exposed to noise by appropriate location of activities (appropriate location and interlocking of different land uses). In this way, noise in residential environment will reduce. Then again, the planned construction of transport infrastructure will increase noise emission (new road sections, the second railway line Divača–Koper, increased traffic flows). However, the envisaged modernization of roads and railways will have also a positive impact (increased liquidity, less traffic congestions, modern technology) on the reduction of noise emission.

Objective: Preserved nature

The following guidelines will have a **positive impact** on the attainment of the objective:

- establishment of protected areas and their management;
- sustainable tourism (eco-tourism).

The following guidelines may have a **negative impact** on the attainment of the objective:

- tourism development (traffic flows, visitors);
- increased maritime transport;
- built-up coast (Port of Koper);
- impact of fishery on the maritime environment.

The environmental objective is directed towards the creation of favourable status of species and habitat types and the preparation of management plans for protected areas. The measures envisaged in the Conception are directed to the establishment of a network of protected areas with active management (management plan, clear management structure). Some measures proposed in the Conception interfere with the Natura 2000 areas and ecologically significant areas, but this does not necessarily imply a negative impact. However, to arrive at a positive impact or to achieve reduction in potential negative impacts, the guidelines of the Nature Protection Institute of the Republic of Slovenia must be taken into consideration for locating and building, and the necessary expert groundwork should be carried out, on the basis of which high-quality project documentation can be made ensuring project implementation with a foreseeable and minimum environmental impacts.

Objective: Good living conditions

The following guidelines will have a **positive impact** on the attainment of the objective:

- enhancement of central activities in settlements – hierarchy of central settlements (better access to services);
- arranged and accessible public areas;
- appropriate location of residential and production activities;
- appropriate location of tourist and residential programmes;
- modernization of road connections;
- promotion of public passenger transport;
- possibility of gas-fired district heating (gas pipeline network);
- information communication network;
- safe drinking water supply;
- ensuring flood safety;
- prevention of unsuitable land use and interventions in erosion areas.

The environmental objective is directed to the provision of the best possible access to services and the avoidance of interventions in restricted zones (flood and erosion areas) or to the safety in such areas. Considering the abovementioned positive impacts (improved access to social services), the proposed measures will contribute to the realisation of this environmental objective. Although some projects proposed in the Conception interfere with restricted zones (flood areas – road connections, erosion areas – road connections, economic zones), but the Conception foresees the provision of flood safety and the prevention of unsuitable land use in erosion areas.

Objective: Preserved cultural heritage

The following guidelines will have a **positive impact** on the attainment of the objective:

- renewal of building heritage;
- renewal of town centres (gentrification);
- promotion of cultural heritage in use;
- management of cultural heritage areas and buildings.

The following guidelines may have a **negative impact** on the attainment of the objective:

- interference of projects with cultural heritage areas.

The environmental objective is dedicated to the preservation of cultural heritage based, in particular, its function. The Conception will contribute to the achievement of the environmental objective, as it provides for guidelines through which cultural heritage will be preserved. Special

emphasis is given to the functionality of cultural heritage buildings (dwelling, social services, etc.) and their management. Some projects proposed in the Conception (transport connections) interfere with the areas of complex protection of cultural heritage. The characteristics of these areas and the location of individual buildings of cultural heritage should be considered in determining the most suitable alignment of a planned transport connection. Moreover, when actual location/construction takes place, the guidelines of the Nature Protection Institute of the Republic of Slovenia should be taken into consideration.

Objective: Efficient transport

The following guidelines will have a **positive impact** on the attainment of the objective:

- promotion of public transport (motor traffic, railways, maritime transport);
- multimodal hubs (passenger and cargo hubs);
- sustainable transport of tourists and commuters;
- arrangement of footpaths and cycling tracks;
- rerouting of freight transport to the railways.

The environmental objective is oriented to the promotion of public passenger transport, cycling, walking and the reduction of road freight transport. Implementation of the proposed measures and projects will contribute to the attainment of the objective due to the abovementioned guidelines. However, it should be noted that the attainment of this objective in the field of public transport does not depend solely on the accessibility of public transport but also on other important factors (arranged and harmonised timetables for all public transport means, a uniform ticket and finally, on the mentality of the population). Similarly, it should be pointed out that in rerouting of freight to the railways, the rerouting does not depend only on arranged cargo hubs but also on other factors (travel time, financial aspects, etc.).

7.5 FINAL ASSESSMENT

This chapter defines and assesses the expected positive impacts, as well as negative ones, which the implementation of measures and projects defined in the Conception of Spatial Development of South Primorska may have on the environment, nature, human health and cultural heritage at the regional level. The impacts of plan implementation on the abovementioned segments are assessed on the basis of impacts of plan implementation on selected environmental objectives of the plan.

It was established during the report preparation (identification and assessment of impacts) that the implementation of the Conception will most positively affect (presented in a random order):

- sustainable use of natural resources, particularly in the sense of rational use of land and renewable energy sources;
- reduction of emissions into the air (public passenger transport, cycle tracks, footpaths, utilisation of renewable energy sources, reduction of the need for motorised mobility due to good accessibility of social services and the infrastructure for alternative transport modes, improved road fluidity, etc.);
- improved status of surface and ground waters, as the input of pollutants into waters will reduce due to the construction of municipal infrastructure and by taking the utmost account of legal acts relating to water protection areas while locating the activities/facilities which affect such areas;
- reduction in the number of people exposed to noise, particularly because of improved public transport and consequent calming of car traffic and also appropriate locating of activities (land use division) in order to reduce noise in residential environments;
- the measures envisaged in the Conception are directed towards the establishment of a network of protection areas with active management (management plans and clear management structure);
- improved access to social services, thus contributing to the improvement of living conditions;
- ensuring flood safety and prevention of inappropriate land use in erosion areas;
- preservation of cultural heritage, especially in terms of maintenance of the function of buildings and cultural heritage areas;

- transport efficiency; however, it should be noted that the achievement of the environmental objectives in the field of public transport does not depend only on the accessibility of public transport but also on other factors, such as regulated and harmonised timetable of all public means of transport, single tickets and, finally, the mentality of inhabitants;
- rerouting of freight to railways; however, it should be also noted here that transfer does not depend only on arranged loading hubs but also on other factors, such as travel time, financial aspects, etc.

On the other hand, it is appropriate to note that the implementation of measures and projects as proposed in the Conception may have a negative impact on (presented in a random order):

- according to the forecasts, water consumption by industry will not reduce since irrigation of agricultural land has been envisaged; however, a guideline has been given to carry out an accurate analysis of the situation, a feasibility study and a cost-benefit study in order to determine the suitability of irrigation measures by areas, and the type and intensity of production;
- further increase in the emission of air pollutants due to the activities increasing transport flows and consequently the amount of air pollutants;
- deterioration of the sea due to the foreseen increase in maritime transport, both cargo and passenger; it is therefore necessary to take fully into account the regulatory requirements and the stipulated mitigation measures to minimise the negative environmental impacts of maritime transport;
- waste management remains unregulated, as the location of regional waste management centre, which would engage particularly in waste recovery, has not been determined yet and, in addition, the Conception does not comprise a policy/activity relating to building waste;
- a threat of increased noise emissions resulting from the planned construction of traffic infrastructure (new road sections, the second Koper–Divača railway line, increased traffic flows); however, the planned modernization of roads and railway has also a positive effect on the reduction in noise emissions (better traffic fluidity, less traffic congestions, modern technology);
- the state of species and habitat types, as some projects proposed in the Conception interfere with the Nature 2000 areas and ecologically significant areas, which, however, does not necessarily imply a negative impact.

The integrated assessment was carried out with a view to draw attention to potential negative impacts of the implementation of measures and projects envisaged in the Conception. They will not solve all environmental problems occurring in the region as some of them are not related to spatial planning and development measures. The proposed measures, projects and recommendations will contribute to the improvement of the environmental situation and indirectly also the nature. The realisation of conceptions will certainly affect the environment and nature as they interfere with some very vulnerable areas, such as the sea, the coast, karstic areas, etc. Since endangered species and habitats are associated with these areas, it is logical that they will be those most threatened by the implementation of the Conception. It has to be reiterated that everything will be implemented on the basis of adopted national, inter-municipal and municipal spatial planning documents; therefore, the guidelines contained in the Conception will be transferred to spatial planning documents and elaborated thereafter. An integrated environmental impact assessment will be carried out in more detail to specify the acceptability of particular spatial planning measures in relation to nature, cultural heritage and human health. At project level, the necessary expert groundwork should be prepared (construction technical, environmental, programming and economic analyses) and on that basis, the requisite project documentation, which will enable implementation of projects with foreseeable and minimum environmental impacts. Provided that mitigation measures are consistently implemented, the identified potential negative impacts will reduce to an acceptable level.

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